



Coordination of Specialized Transportation Services: 1977

VOLUME ONE: ANALYSIS OF NEEDS

Tri-State No. TS H-221 Project IT-09-0069

The preparation of this report was financed, in part, through grants from the U.S. Department of Transportation, Federal Highway Administration, and the Urban Mass Transportation Administration under the Urban Mass Transportation Act of 1964, as amended; a grant from the Connecticut Department of Transportation; an urban planning grant from the U.S. Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954, as amended; by a regional planning grant from the Department of Planning and Energy Policy, State of Connecticut; and by contributions from member municipalities of the Central Naugatuck Valley Region.

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TITLE: Coordination of Specialized Transportation: 1977

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SUBJECT: Transportation needs of the elderly and handicapped,
characteristics of the transit systems and a summary
of needs and opportunities.

DATE: March, 1977

LOCAL PLANNING
AGENCY: Central Naugatuck Valley Regional Planning Agency

SOURCE OF
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TRI-STATE NO.: TS H-221 D-99313 IT-09-0069
Coordination of special transit services study in
Central Naugatuck Valley, Conn.

SERIES NO.: N.A.

NUMBER OF PAGES: 108

ABSTRACT: The first part of this study presents an analysis of the
transportation needs of the elderly and handicapped,
their modes of travel and the causes of their immobility.
The second part of this study inventories all the
specialized transit services available for the transit
dependent and identifies deficiencies of service, areas
of duplication and levels of service for each mode of
travel. The third part of the study presents a summary of
the needs of the elderly and handicapped and opportunities
for meeting those needs within the resources of the
existing transit system.

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Introduction

Transportation for the elderly and the handicapped is more than a system of travel; in many cases, it may be an important means of increasing their morale, improving their health and maintaining their physical well-being. Numerous studies of the institutionalized and isolated elderly have clearly shown that lack of mobility can lead to social withdrawal, malnutrition, lack of proper medical care and a general decline in vitality.

In recent years, however, the elderly and handicapped in our society have found it increasingly difficult to travel about on their own. This problem has been particularly severe as public transportation has declined and failed to accommodate their specific transportation needs. To some extent, declining public transportation has increased the reliance of the elderly and the handicapped on transportation provided by friends or relatives, but this has always been a major method of travel for the elderly and the handicapped. Their limited mobility, physical and developmental impairments or advancing age have traditionally forced them to rely on others for assistance when traveling.

Though family transportation meets some of their needs for mobility, this has become more difficult to obtain in recent years as the extended family has become less cohesive and relatives are, in many cases, no longer living in close proximity. Not surprisingly, the breakdown of the extended family in America has increased the isolation of the elderly and the handicapped, either forcing them to become more independent and self sufficient, or easing them into extended care facilities that will provide for their needs. Neither of these alternatives is satisfactory. On the one hand, the elderly are encouraged to travel on their own when this may often be impossible; on the other, they are confined in institutions which discourage their mobility and increase their social withdrawal.

In response to the increasing immobility of the elderly and the handicapped, many

social service agencies and municipalities throughout the nation have developed specialized transportation systems to serve the elderly and the handicapped within their community. Since 1970, these specialized mini buses have mushroomed into a major form of supplementary public transportation in many areas, including the Central Naugatuck Valley Region.

In 1971, for example, there was only one mini bus for the elderly in the Region (operated in Naugatuck); but by 1975, ten of the Region's 13 municipalities were offering mini bus service to the elderly. Similarly, over 28 other private, non-profit and public transportation services have emerged in the past 5 years as more and more agencies have felt the need to provide special transportation programs for their clients. The increased interest in specialized transportation is an outgrowth of the declining convenience of conventional bus service.

In many cases, however, these specialized transportation systems have been planned and operated in a vacuum with no consideration for the service of other agencies or conventional public transit.

One indication of the established need for, and the rapid proliferation of, these organizations can be seen in the annual expenditures and the annual number of passenger trips made by all the specialized transportation services operating in the Central Naugatuck Valley Region. In fiscal year 1975-76, there were nearly 215,000 passenger trips made by specialized transportation services and \$631,545 spent in operating these services. In contrast, the Waterbury Yellow Cab Company carried 247,000 passengers in 1975 at a cost of \$225,942 and North East Transportation Company provided 1,282,000 passenger trips in the Waterbury area at the cost of \$829,000.

While many of these specialized transportation systems have attempted to meet the needs of the elderly and handicapped, it has often been done without clear planning, coordination and evaluation of the actual transportation problems of these individuals.

The first section of this report analyzes the transportation needs of the elderly and the handicapped; the second section discusses the quality and level of transportation available to these individuals, and the final section indicates where improvements are needed to fulfill the transportation needs of these individuals through the use of existing and alternative transit systems.

**The Elderly
&
Handicapped**

A. The Elderly

In 1970, 33,550 elderly persons (60 years and older) resided in the Region, accounting for 15% of the total population. Approximately 56% of these individuals were living in the City of Waterbury, with the remainder relatively evenly distributed throughout the other 12 municipalities of the Region. Outside of Waterbury, the municipalities of Cheshire, Naugatuck, Southbury and Watertown had the largest elderly population, accounting for 62% of the suburban elderly.

Housing patterns of the elderly in Waterbury have contributed to an overall social segregation of the city's elderly, often reinforcing their lack of access to convenient forms of transportation. Unlike suburban elderly who live over much broader geographic areas, are generally more integrated into their community and have higher incomes, most of Waterbury's elderly live in neighborhoods of the city which have become distinct elderly communities. In 1970, 57% of the city's elderly lived in 9 of the city's 28 census tracts which include the downtown area, Bunker Hill, East Farms, Town Plot and the South End.¹ Some of these city neighborhoods had elderly populations that accounted for as much as 30% of their total population². In addition, an estimated 10% of the city's elderly live in 18 elderly housing projects, most of which are owned by the Waterbury Housing Authority.³

Isolation is also a severe problem for the many elderly who have been put away in institutions or forgotten about by relatives who no longer have the time to meet their needs. These individuals - the institutionalized elderly and those living alone - are usually the oldest and most immobile members of the elderly community.⁴ By 1975, according to the Operation Outreach Survey, an estimated 11,306 elderly

¹U.S. Bureau of the Census; Census of Population and Housing: 1970; Census Tracts; Final Report PHD (1)-227 Waterbury, Connecticut SMSA.

²Ibid.

³Mini Transit Elderly Housing Survey, 1975.

⁴Northwest Connecticut Agency on Aging, Operation Outreach - Detailed Statistics for Waterbury, August, 1975.

(60 and over) were living alone in the Region and another 1,300 elderly were living in extended care facilities. Together, these 2 groups accounted for slightly more than one out of every three elderly residents of the Region. While the advanced age of these two groups tends to limit their mobility and use of public transportation, these individuals frequently remain isolated simply because of a lack of assistance from friends, relatives or staff at the facility in which they live.

Suburban as well as Waterbury elderly residents have also had more difficulty moving about than other age groups because of their greater share of physical and mental disabilities, lower income, lack of familiarity with public transit and personal isolation within the community. In 1971, the Urban Mass Transportation Administration stated that 10% of the nation's elderly had impaired vision and 13% had impaired hearing.⁵ On a regional level, U.S. Census data indicates that in 1970, 13.6% of the elderly (60 years old or over) had incomes below the poverty level and 23% of those 65 years and over were living alone. This combination of low income, personal isolation within the community and visual or hearing impairments has limited the transportation options of many of the Region's elderly.

The elderly themselves reinforce these findings concerning the need for improved transportation. Elderly members of the regional community find that next to low income, transportation is their most serious problem.⁶ In some of the suburban municipalities, transportation has often been the greatest problem, since suburban bus service is limited or non-existent and mini bus service offers less than complete coverage of the Region. Within Waterbury, the elderly in those neighborhoods where public bus service is minimal or non-existent, tend to be more vocal than other elderly residents of the city about the need for better public service.

⁵Public Transportation for the Elderly and Handicapped, 1971 Urban Mass Transportation Administration, p.1.

⁶Operation Outreach, August, 1975; Detailed Statistics for the Central Naugatuck Valley Region, p. 4.

An estimated 1 to 2% of the elderly in Waterbury (not living in institutions) surveyed by Operation Outreach, don't travel at all. These individuals either depend upon someone else to do their shopping or have deliveries made at home.

However, this estimate may undercount the number of totally immobile elderly since 5% of the nation's elderly population not in institutions are homebound.

For these individuals, the telephone, family and friends, and cooperative grocery stores making home deliveries may be their only contact with the outside world.

For those living in institutions, the level of isolation is far greater than the elderly living within the community. A November, 1976 survey of extended care facilities conducted by the Central Naugatuck Valley Regional Planning Agency (CNVRPA) revealed that 72% of the 1,508 residents of homes for the aged, rest homes and nursing homes don't travel at all. Though many of these individuals are unable to travel because they are bedridden or are confined to their facility, approximately 700 individuals or 50% of the residents of these facilities are ambulatory and could travel on their own or with assistance if transportation was available. Significantly, as many as 45% of the ambulatory residents surveyed in November, 1976 never travel outside of their facility. A lack of community activities for the institutionalized elderly, minimal state allowances of \$25 a month for personal needs (including transportation), limited contact with family members and generally non-existent transportation services offered by these institutions have isolated these elderly even when they are capable and willing to travel on their own.

For the elderly in institutions or in the community who do manage to travel, however, there are still obstacles to overcome.

Causes of Immobility

Lack of Personal Transportation

One of the clearest indications of the transit dependence of the elderly is their lack of personal transportation. In 1975, the Operation Outreach survey found that 47% of all the elderly in the Region, compared to only 15% of the Region's 1970 general population, did not own an automobile. As can be seen from Table 1, lack of automobile ownership is a common problem in every one of the Region's municipalities. It is especially severe in Waterbury, where auto ownership has invariably been lower than the suburban municipalities. The problem is compounded even further for those elderly who are living alone. Operation Outreach found that in Waterbury, approximately 21% of all the elderly who were living alone did not own a car. Nonetheless, on a regional level, the Outreach survey found that of those elderly who do travel, 55% travel in their own cars with another 31% relying on rides in cars owned by friends or relatives. In effect, 86% of the elderly travel by automobile. (See Table on page 6)

Lack of Access to Public Transportation

Another factor contributing to the relative immobility of the elderly is their lack of access to public transportation. Of the elderly who travel, only 9% in the CNVR and 15.6% in Waterbury use public bus service. At the time of the Operation Outreach survey, only 43% of all the Region's elderly lived in a neighborhood served by a bus or some other means of convenient transportation.⁷ 90% of these elderly were residents of Waterbury. Within Waterbury, approximately 70% of the elderly were served by a bus or another convenient form of transportation, which may, to some extent, lessen the problem of low auto ownership among the city's elderly.

⁷Northwest Connecticut Agency on Aging, Operation Outreach, August, 1975.

The physical design of existing buses, the disabilities of the elderly, lack of evening bus service and inadequate bus coverage of some of Waterbury's neighborhoods have often forced many elderly to forego the use of this service.

In contrast to the elderly living in Waterbury, those living in the suburbs have little or no bus service. Based on the Operation Outreach survey, only 17% of the 14,685 elderly living in the suburban municipalities indicated that they had access to public transportation.⁸ However, in the municipalities of Prospect, Southbury, Thomaston, Middlebury and Woodbury, as many as 93% or more of the elderly indicated that they were without access to public transportation.⁹ (See Table II)

Dependence Upon Friends or Relatives

Residents who have neither personal nor public transportation available to them are often forced to depend upon friends or relatives to carry them about. In 1975, Operation Outreach found that one out of every three elderly in the Region depended upon friends or relatives to meet their normal transportation needs. For the elderly who still live with their children or with a spouse who is able to drive, the problem is minimal. Yet the many who are living alone and are without an automobile are forced to rely on personal assistance from an outside source. For these individuals, regular transportation becomes especially imperative since they are without family members within their home to provide for their needs.

As can be seen from Table III those living alone without an automobile were far more likely to depend upon personal assistance to move about than were the Waterbury elderly as a whole. Approximately 55% of all those Waterbury elderly living alone who were without an automobile depended upon friends or relatives, whereas only 33% of the elderly in general used this as their usual method of transportation.

⁸Public transportation was broadly interpreted by the elderly to include bus, mini bus, taxi or Waterbury bus service.

⁹Ibid.

Besides being more dependent upon friends or relatives, those elderly who are living alone tend to be the most dependent upon public transit. As can be seen in Table III, while 15% of the city's elderly surveyed by Operation Outreach used buses as their primary means of travel, as many as 23% of the elderly living alone relied on this method of transportation. When taxis and special transportation services are included, nearly 1 out of every 4 elderly living alone relied on public transportation to move about in 1975. (See Table III)

Comparison of Bus and Auto Use Among the Elderly: 1975

	<u>% of Elderly Using A Bus As Primary Means of Travel</u>	<u>% of Elderly Using Their Own Car As Primary Means of Travel</u>	<u>% of Elderly Traveling In Auto Owned by Friends or Relatives</u>
Waterbury	15	46	33
Remainder of Region	3	63	31
CNVR	9	55	31

SOURCE: Area I Agency on Aging, Operation Outreach, 1975.

Physical Disabilities

Another factor contributing to the reduced mobility of some elderly is their increased likelihood of having one or more chronic conditions. While 85% of the nation's elderly (65 and over) have one or more chronic conditions,¹⁰ only 20% have actually experienced reduced mobility as a result of a chronic condition.¹¹ As can be seen in the table on the following page, 8% of the nation's elderly have

¹⁰ U.S. Dept. of Health, Education and Welfare, New Facts About Older Americans, June, 1973, p. 11.

¹¹ Ibid.

some trouble getting around alone and as many as 5% are homebound.

Indications of Mobility Among the Elderly in the Nation: 1971

85% Have one or more chronic conditions

20% Have an interference with their mobility

8% Have some trouble getting around alone

6% Need a mechanical aid to get around

5% Are homebound

SOURCE: New Facts About Older Americans, U.S. Dept. of Health, Education and Welfare, June, 1973, p. 11.

While these national statistics indicate that many elderly are experiencing difficulties moving around by themselves, they appear to under-represent the true level of immobility experienced by elderly (60 years and over) in the Central Naugatuck Valley Region. Operation Outreach found that fully 26% of the Region's elderly have a disabling illness which limits their activity, and 9% of the elderly are unable to manage their own shopping as a result of their disability. These survey results are somewhat higher than those reported by HEW and indicate that many elderly must depend upon friends or relatives or, when these individuals are not available, on the services of vehicles adapted to carry non-ambulatory individuals.

Low Income

Certainly, the most common limitation to the mobility of the elderly is low income. In 1970, 13.6% of the elderly in the Region, 60 years and over, were below the poverty level. Based on income data from the 1975 Operation Outreach survey, more than 36% of the Region's elderly responding had incomes below the 1975 national poverty level of \$3,070 set for a family of two.

Lower income levels clearly have a negative effect on the mobility of the elderly.

As can be seen in the table on the following page, elderly persons earning less

than \$2,500 a year were more than twice as likely to be represented in the generally immobile group of those traveling less than once a month, compared to elderly earning over \$10,000 a year.

**Frequency of Visits with Friends or Relatives
By Income Among the Elderly in the Area I District* on Aging:1975**

	(In Percent)				
	Under \$2500	\$2500 4999	\$5000 7499	\$7500 9999	\$10,000 or over
Daily	38.9	42.9	47.9	44.6	51.5
Once a Week	36.5	37.9	34.3	36.7	35.0
Every 2 Weeks	7.6	7.8	6.5	7.2	5.1
Once a Month	8.6	8.6	6.0	7.8	4.6
Less than once a Month	8.4	5.5	5.2	3.6	3.8
	100	100	100	100	100

*Includes the Central Naugatuck Valley, Litchfield Hills, Northwestern Conn. and the Housatonic Valley Regional Planning area.

SOURCE: Area I Agency on Aging - Operation Outreach 1975 Cross Tabulation Number 16

Furthermore, the frequency of daily visits made by elderly rises almost directly with increasing income levels. While only 38.9% of those earning less than \$2,500 a year made daily visits to friends or relatives, as many as 51.5% of those earning over \$10,000 visit daily with friends or relatives.

Institutionalization

Another important segment of the elderly population requiring transportation are those living in homes for the aged, rest homes, nursing homes and other extended care facilities who are without regular contact with the outside world. As of March, 1975, there were approximately 1,300 elderly living in extended care facilities in the Region, accounting for 4% of all the elderly in the Central Naugatuck

Valley Region.¹² Often, the transportation needs of the institutionalized elderly are overlooked since many assume that these individuals are either unable or unwilling to travel. Though nursing homes and homes for the aged may provide few or no incentives for the travel of their clients, many of these elderly desire to maintain contact with the outside world.

Types of Activities Engaged in by Elderly
in Extended Care Facilities in the CNVR: 1975.

	<u>Home for Aged</u>	<u>Rest Home</u>	<u>Nursing Home</u>	<u>Total</u>
1. Doing Volunteer Work in Community Organizations	2	0	17	19
2. Belonging to Other Clubs Or Organizations Outside the Institution	26	13	61	100
3. Engaging at Least Monthly in Cultural Activities (Films, Plays, Sporting Events) outside Your Institutions	30	59	193	282

SOURCE: CNVH&MHPC, Health Systems Plan, October, 1975.

A large number of these individuals remain secluded within their institution simply because the institutions are unable to provide transportation and family members have forgotten about or are unable to care for their needs.

The isolation of elderly individuals does not imply that these individuals wish to remain institution bound. Often times, nursing homes and homes for the aged implicitly discourage the mobility of their patients by assuming that they are incapable of traveling on their own or engaging in activities outside of their institution.¹³

¹²Information Packet for Health Services in the Central Naugatuck Valley, Central Naugatuck Valley Health & Mental Health Planning Council, July, 1975, p. II-5 and Detailed Survey Results of Extended Care.

¹³Mental Health Care and the Elderly: Shortcomings in Public Policy. A report by the Special Committee on Aging, U.S. Senate, U.S. Government Printing Office, p. 15.

Presently only one of the Region's 33 extended care facilities provides regular transportation with their own vehicles. The vast majority of the remaining facilities depend upon family or relatives to transport their residents. However when relatives are not available chair car, livery, taxi and mini bus services have been used as a last resort. Significantly only one extended care facility in the Region stated that its residents made use of public bus service.¹⁴ On occasion, these organizations do hire a large bus to transport their patients to outside activities, but these events are the exception rather than the rule. The vast majority of the institutionalized elderly have less contact with the outside world than the elderly who are still able to support themselves in a non-institutional setting. As can be seen from the table on the previous page and the one below, less than 15% of the institutionalized elderly living in the CNVR were involved in cultural activities outside of their institutions at least once a month at the time that the Central Naugatuck Valley Health and Mental Health Planning Council (CNVH&MHPC) survey was conducted.

Level of Participation of the Elderly
in Activities Outside their Institution: 1975

	<u>Total Number Involved In Activities At Least Once a Month</u>	<u>Total Institutional Population Surveyed, March, 1975</u>	<u>Percent of Those Surveyed Who Travel Outside of Institution at Least Once a Month</u>
Home for Aged	30	188	16.0
Rest Home	59	215	27.4
Nursing Home	193	1,507	12.8
TOTAL	282	1,910	14.8

Source: CNVH&MHPC Health Systems Plan, October, 1975.

¹⁴ CNVRPA Survey of Extended Care Facilities, November, 1976.

In contrast, 96% of the elderly residents of the CNVR surveyed by Operation Outreach made visits to friends or relatives at least once a month. This isolation and immobility of the elderly appears to have many negative effects upon their health and well being. According to a report by the Special Committee on Aging, titled, Mental Health Care and the Elderly: Shortcomings in Public Policy,

"Perhaps the greatest barrier to mental health of an institutionalized patient (and nursing homes are also institutions) is isolation. He often feels 'put away' and abandoned by family and friends. This feeling of isolation can lead to depression, dependence, confusion and finally complete withdrawal from the world around him. Sunday visits from the family are not enough to prevent deterioration."¹⁵ (emphasis added)

However, there is a growing interest in providing environments which maximize a resident's opportunity for independence and which at the same time, will increase the need for improved transportation services.¹⁶ This concern has been supported by CNVH&MHPC in its 1975 Health Systems Plan for the CNVR. They indicate that there is a need for: (1) more flexible "partial hospitalization" policies by nursing homes; (2) alternatives to institutionalization which could give more support to families who would keep a mentally ill elderly parent at home. One very important alternative might be to encourage nursing homes to offer day programs for elderly who would return to their own homes at night.¹⁷ Though few elderly participate in part-time programs in extended care facilities, a recent change in medicaid and medicare legislation may encourage health administrators to provide institution-bound and non-institutionalized elderly with health care programs on a part-time basis. Such a change in extended care programs might improve the morale of the institution-bound elderly and offer better health care treatment to those who are living in the community.

In either case, partial institutionalization will certainly increase the mobility of

¹⁵Mental Health Care and the Elderly: Shortcomings in Public Policy. A report by the Special Committee on Aging, United States Senate, p. 92.

¹⁶Ibid.

¹⁷Health Systems Plan for the Central Naugatuck Valley Region, October, 1975, CNVH&MHPC, p. C-89.

the elderly and require the establishment of some form of regular transportation to handle their needs. Extended care facilities may desire to (1) purchase their own buses or (2) establish a contract with a chair car service, an elderly mini bus or livery service, equipped with suitable equipment to carry non-ambulatory patients. To some extent, the type of transportation service established to serve the elderly will depend upon the number of individuals involved in these programs. If partial institutionalization never becomes a popular program, then family members will continue to handle their needs. However, if partial institutionalization gains widespread acceptance, then extended care facilities, individually or as a group, might find it attractive to develop their own specialized transportation systems or establish a contract for transportation with a chair car or livery service.

B. The Handicapped

As the terms are used by the U.S. Census Bureau, a handicapped or disabled person is one who has a physical, medical, emotional, or developmental condition which limits the type of work he or she can do. Of the 10,387 handicapped persons, 16 to 64 years of age in the CNVR, identified by the U.S. Census, 26% or 2,650 handicapped persons were actually disabled for 6 months or more. More recent data from social service agencies in the Waterbury Area indicates that the actual number of handicapped persons may be considerably less than 10,387.

Though no exact figure is available for the total number of handicapped residing in the Central Naugatuck Valley Region, due to the fact that there is some overlap between the clients of the various agencies, a minimal estimate would be 5,000 individuals. As can be seen in the table in the following page, the maximum estimate for fiscal year 1975-1976 would bring the total to slightly over 6,000 individuals or less than 3% of the Region's population.

**Handicapped Persons Identified by Local Agencies
in the Greater Waterbury Area ***

	<u>1974-1975</u>	<u>1975-1976</u>
Waterbury Regional Center, Easter Seal Rehabilitation Center, Waterbury Associ- ation for Retarded Citizens and United Cerebral Palsy	864	1,009
Board of Education	2,225	2,225
Division of Vocational Rehabilitation	1,500	1,800
Division of Vocational Rehabilitation Residual Clients **	1,000	1,000
	5,589	6,034

*The Greater Waterbury Area includes the municipalities of Middlebury, Cheshire, Naugatuck, Prospect, Watertown, Waterbury and Wolcott.

**Residual clients are former clients who are no longer receiving assistance from the Division of Vocational Rehabilitation.

SOURCE: Waterbury Regional Center and the Div. of Vocational Rehabilitation, 1975.

Based on U.S. Census data for handicapped persons 16 to 64 years of age in 1970, the majority of these persons lived in Waterbury and its contiguous urbanized areas. Of the 2,650 handicapped persons, disabled for over 6 months, 48% lived in Waterbury and as many as 70% lived in the Region's urbanized areas covering Naugatuck, Watertown and Waterbury (see Table IV).

In 1975, the Waterbury Regional Center developed a similar profile of the location of the Region's handicapped. Approximately 62% of the clients of the Waterbury Regional Center, the Easter Seals Rehabilitation Center of Greater Waterbury Inc., United Cerebral Palsy of Greater Waterbury and the Waterbury Association for Retarded Citizens, resided in Waterbury during 1975. (See Table IV) Of the 592

handicapped persons identified as clients of these four agencies in Waterbury, the largest concentrations lived in the same census tracts in which the U.S. Census indicated the elderly were most concentrated. Approximately 30% of all the handicapped clients identified by the Waterbury Regional Center lived in the inner city (Census Tracts 3501-3505) with another 25% residing immediately to the south of the inner city in Census Tracts 3512-3516.

As it is for many of the Region's elderly, the most important need for the handicapped is transportation. Nearly 70% of all the handicapped surveyed by the 1976 Waterbury Regional Center (WRC) Housing and Accessibility survey indicated that transportation services were their most important need whereas only 58% indicated medical facilities, 40%, recreational services and 35%, educational services. This strong demand and need for transportation among handicapped persons reflects their great dependence on others to travel. Unlike the elderly, the handicapped are more often immobilized by the architectural barriers of public bus service with the result that they are often more dependent upon family or friends to move about.

The Waterbury Regional Center has recently done extensive work in identifying the transportation needs of the handicapped. In March, 1975, the Waterbury Regional Center conducted a survey of handicapped residents in the Waterbury Area which indicated that the transportation needs of these individuals are not currently being met. According to the Waterbury Regional Center, there are four primary transportation needs of the individuals they surveyed:¹⁸

1. Routine transportation to alternative work sites
2. Routine transportation to workshops (morning to early afternoon)
3. Semi-regular transportation to clinic services for physical therapy
4. Transportation to evening recreation programs.

Another Waterbury Regional Center survey conducted in July 1975, consisted of a

¹⁸CE Maguire, Inc., Short Range Transit Development Program, (draft) October, 1975, p. 111.

mail-back questionnaire sent to 650 handicapped persons in the CNVR. The results of the survey are based on the 20% who responded. The survey found that 66% of the handicapped were provided with transportation services to a daily school or workshop program while 34% were without transportation services.

Based on the survey, many handicapped individuals appear to be without sufficient transportation to meet all of their needs. When asked by the Waterbury Regional Center if they would use transportation services, 83% said yes. The majority of those who indicated an interest in making use of transportation services were individuals without any form of daytime, evening or weekend transportation. Slightly more than two out of every three handicapped individuals who indicated a need for more transportation were without transportation at the time of the survey. Like the elderly, handicapped individuals tend to be less mobile in the evenings and on weekends since many public forms of transportation are not available. As an example, the lack of evening bus service often limits their access to recreation programs or forces them to depend upon the more convenient, but more expensive, taxicab. In turn, their activities may be further limited because their incomes are too low and they are unable to operate an automobile.

Causes of Immobility

There are a variety of factors that limit the mobility of the handicapped in the Region. Generally, physical disability, lack of coordinated body movement, insufficient home training in independent travel, and emotional problems influence the capabilities of the handicapped to travel on their own. However, environmental factors may further impede their mobility when public facilities and transit vehicles are not designed for the easy access of the handicapped. As with the elderly, the existing bus system may restrict their full mobility due to a lack of bus routes, infrequent service, no evening or weekend service, difficult entry and exitways on buses and expensive bus fares.

The fact that the elderly and handicapped share the same transportation problems, is not merely a coincidence. According to one study,¹⁹ 53% of all the nation's handicapped persons are also elderly. Like the elderly, handicapped persons are less likely to use conventional modes of public transit; but, unlike the elderly, they are less likely to own or operate an automobile. This is often due to their physical or developmental impairments, but just as often, it is due to the fact that they have received no physical training or therapy to improve their abilities to travel on their own. Though some handicapped individuals are unable to use conventional public transit, there are many who with training could ride by bus.

Physical Disabilities

There are a variety of disabilities that may impede the free mobility of the handicapped. Limb malfunctions, perceptual, visual or hearing impairments, mental retardation, emotional disturbances and orthopedic impairments are the major problems that may limit a handicapped person's ability to use public transportation. A list of these major disabling conditions and their effect on mobility is presented in Table V. As can be seen in Table V, degenerative conditions associated with aging, hereditary and congenital conditions, and disease and damage to the nervous system are the three major types of disabilities that lead to limited mobility. However, many of these disabilities can be overcome by travel training, orthopedic supports, wheelchairs, or the provisions of barrier free public buses.

The mentally retarded provide a clear example of the extent to which the handicapped can adjust to public travel. According to a report by the President's Committee on Mental Retardation, there is a strong need to develop independent travel for the mentally retarded since they are generally dependent on others for transportation for their entire lives.

¹⁹ George Amedee, Demand Responsive Transportation for the Elderly and Handicapped and Poor, Undated and Unpublished.

The Committee concluded,

"The tragedy of this dependence is that, in most cases, it is not necessary. The mentally retarded have been trained to travel independently on public transportation, to drive automobiles, and even to drive buses. The retarded are capable of traveling independently - even those with very low I.Q.'s - and should be trained to their maximum capability." ²⁰

Though much effort and early childhood training are necessary to teach mentally retarded persons to use public transportation, these efforts can contribute to the life long independence of these individuals.

Wheelchair Users

Though wheelchair users constitute a small fraction of the total population, their transportation needs are much greater and more difficult to meet than most of the elderly and handicapped residents of the Region. In 1975, the Division of Vocational Rehabilitation had less than 60 wheelchair users out of a total of 1,500 clients in the Central Naugatuck Valley Region.²¹ Similarly, the Waterbury Regional Center has identified only 20 wheelchair clients out of a total of 300 individuals participating in their evening social and recreational programs.

While these agencies have a small number of wheelchair clients, based on 1970-1975 estimated local sales of wheelchairs in the Waterbury area, the number of wheelchair users in the Region may be as high as 500.²³ Furthermore, when wheelchair rentals in the Waterbury area are included, there may be as many as 200 to 300 additional persons who are temporarily dependent upon the use of these devices to move about. Though there may be as many as 800 wheelchair users in the

²⁰ The President's Committee on Mental Retardation: Transportation and the Mentally Retarded, June, 1975, p. 11.

²¹ Interview with Charles Winans, Director of the Waterbury District Office of the Division of Vocational Rehabilitation, December, 1975.

²² Interview with Tom Condon at the Waterbury Regional Center, December, 1975.

²³ Interview with the owner of the largest retail wheelchair outlet in the CNVR, December, 1975. However not all wheel chair sales are to individuals. Wheelchairs owned by hospitals and extended care facilities account for a portion of the total wheelchair population.

Region, this represents less than one third of one percent of the Region's total population.

Lack of Access to Transportation

For some handicapped, physical disabilities may be less of an obstacle to the use of public transportation than their distance from a bus route. Approximately 20% of all the handicapped persons living in Waterbury identified by the Waterbury Regional Center reside in neighborhoods where bus service is inconvenient for their normal use. As many as 110 of the 592 handicapped Waterbury residents identified by the Waterbury Regional Center live in neighborhoods located in the periphery of the city and in areas where bus service is limited or non-existent.

In the suburban municipalities, the situation appears to be far worse with little or no bus service available to any segment of the population. Though no accurate estimate is available on the convenience of suburban bus service for the handicapped, it is reasonable to conclude that the convenience of suburban buses is comparable to that stated by the Region's elderly in the 1975 Operation Outreach survey. In effect, this would mean that over 83% of the Region's handicapped persons are not conveniently served by buses in the suburbs.

Architectural Barriers

In many cases the handicapped are provided with sufficient transportation by bus, family or friends but may be immobilized by the architectural barriers of service and facilities they wish to visit. Indeed, some of the most important buildings

that handicapped persons must enter are often not provided with easy entry ways.

Doctors' offices, restaurants, churches and grocery stores were cited as the four most difficult buildings to enter by handicapped persons surveyed in the 1976

Waterbury Regional Center Housing and Accessibility Survey. With the exception of restaurants, the survey found that these were also the most important buildings for handicapped persons to enter.

When asked how they would improve the physical structure of these facilities so that handicapped persons could use these buildings the majority indicated providing ramps, elevators and self opening doors. Almost three out of every four handicapped persons surveyed indicated that ramps were needed in public facilities, 55% felt elevators were needed and 55% felt wider and self-opening doors were needed. Other major architectural alternatives desired by handicapped persons surveyed were hand rails (24%), wider aisles (7.7%), lower facilities (such as telephones, store displays, mail boxes)(4.4%), improved bathroom facilities (rails in bathrooms, wider bathrooms)(18.2%), one level buildings (6.7%) and special parking for the handicapped (4.8%).

These architectural alterations will undoubtedly increase the services and opportunities available to the handicapped and stimulate a greater level of independent travel.

Modes of Travel

As can be seen in the table on the following page, the handicapped are similar to the elderly in the modes of travel they typically use. Approximately 40% of the Region's handicapped travel in their own cars with another 29% relying on rides from cars owned by relatives or friends.

However, based on the Waterbury Regional Center Housing and Accessibility Survey, the handicapped tend to use public transportation slightly more than the elderly. The WRC Survey found that nearly 26% of the handicapped clients surveyed relied on either public bus, taxi, livery, specialized transportation services or school buses, whereas only 17% of the elderly used these modes of travel.

The majority of the handicapped who use public transportation are mentally retarded. According to the 1976 WRC Survey, as many as 60% of all the trips made by the handicapped on public forms of transportation were made by the mentally retarded.

As can be seen in Table VI, those with cerebral palsy or lower limb malfunctions

accounted for nearly all of the remainder who utilized some form of public transportation. However, because of their physical disabilities, these individuals utilized specialized transportation services such as those provided by United Cerebral Palsy, MiNi Transit or Easter Seal Rehabilitation of Greater Waterbury, Inc. since personal assistance is offered by these services to clients unable to enter and exit from their vehicles.

Based on the 1976 Waterbury Regional Center Survey, those with muscular incoordination, the deaf, the blind, or those with severe limb malfunctions, depend almost entirely upon their family or friends to move about. These individuals are incapable of using existing public transportation since most of them require some level of personal assistance whenever they travel.

The 1976 WRC Housing and Accessibility Survey identified only 2 persons who were homebound representing approximately 2% of the total handicapped population. A larger survey of clients of the Division of Vocational Rehabilitation found that only 40, or about 3% of the district office's 1,500 clients, were totally homebound.

Comparison of Modes of Travel Used
by the Elderly and Handicapped in the CNVR: 1975 - 1976

	<u>Elderly</u>		<u>Handicapped</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Own Car	827	55.4	51	40.2
Bus	134	9.0	12	9.4
Family & Relative	379	25.4	33	26.0
Taxi and Livery	12	0.8	3	3.0
Specialized Transportation	7	0.5	11	8.7
School Bus	0	-	6	4.7
Friends	94	6.3	4	3.1
Don't get out	2	0.1	2	1.6
Walk	37	2.5	2	1.6
TOTAL	1,492	100.0	127	100.0

Source: Area Agency on Aging, Operation Outreach, 1975 and the Waterbury Regional Center, Housing and Accessibility Survey, 1976.

**The
Transit
System**

Characteristics of Transit Systems Serving the Elderly and the Handicapped

There are a variety of transportation services available for elderly and handicapped residents of the Region. Buses, taxis, liveries, chair car services, inter-city bus lines, commuter rail service, elderly mini bus programs and social service mini bus services all provide some form of transportation for the elderly and handicapped in the Region.

In Waterbury, the North East Transportation Company provides local bus service with limited service to Watertown, Wolcott and Middlebury. Elderly and handicapped persons in the City of Waterbury are also serviced by Waterbury Yellow Cab, B & C Medical Service and the Mini Transit Service for local transportation.

In the suburban municipalities, public transportation is limited or non-existent. At present, only 6 of the Region's 12 suburban municipalities are served by inter-city buses. Bus service is provided by Bonanza Bus Line between Southbury and Waterbury, by Connecticut Company for service between Waterbury, Cheshire and New Haven, by Corbin Coach for service between Waterbury and Hartford, and by Arrow Bus Line and Valley Transportation for service between Naugatuck and Waterbury. Less frequent, more irregular runs exist between Waterbury and Thomaston (Arrow) and between Waterbury and Beacon Falls (Valley).

Similarly, taxi service is limited and often inadequate for elderly residents living in the suburbs. Only the municipalities of Cheshire, Prospect, Watertown and Southbury are provided with local cab service and of these only Watertown has 24 hour, seven days a week service. While taxi service is limited, all of the suburban municipalities, with the exception of Bethlehem, Middlebury, and Beacon Falls, are provided with one or more mini bus services for the elderly. These mini bus programs are relatively small at present, serving approximately 9% of the suburban elderly, but appear to offer a substitute for limited suburban bus service.

In addition, there are a wide variety of private organizations and social service agencies providing transportation for the elderly for special trip purposes. A complete listing of these services can be found in the CNVRPA publication, A Consumers' Guide to Transportation in the Central Naugatuck Valley Region.

Finally, the cities of Naugatuck and Waterbury are served by the Penn Central Rail Line connecting the Region with Bridgeport and New York City.

Local Bus Service

North East Transportation Company presently is Waterbury's sole local bus service covering 13 designated routes. Service on the 13 routes is confined mainly to Waterbury with routes to Wolcott and Watertown and a tripper into Middlebury. All of North East's regular routes radiate outward from Waterbury's CBD. Headways are generally 30 or 60 minutes in length with buses primarily in operation for a 12-13 hour day.

Within the last decade, the Waterbury local bus service has faced a downward trend in passengers carried, miles traveled, and profitability. From 1966 to 1975, there was a 77% decline in the total number of passengers traveling by bus, dropping from 5,754,625 in 1966 to 1,288,281 in 1975. This precipitous drop in bus ridership was reinforced by a 71% decline in the number of bus miles traveled during the same period. North East is currently privately owned and operated; however, the Company's subsidy arrangement with ConnDOT gives the State ultimate control over routes and schedules.

North East presently operates a fleet of 32 buses. Eighteen of the vehicles are 41-45 passenger buses, all at least 19 years old. The remaining fourteen are 53 passenger buses purchased new by the State in 1974 and leased for \$1 per year to North East. A grant application for 25 new replacement buses has recently been approved by the Urban Mass Transportation Administration (UMTA). These buses should be available for service in about 2 years.

The average adult fare for all single zone bus routes in Waterbury (except Berkeley-Long Hill which is 25¢) has been 50¢; double zone fare is 85¢. Transfers are free (except from Berkeley-Long Hill). In line with the new UMTA funding requirements, fares for the elderly are half the normal fare (25¢). Waterbury has one of the highest fares in the State.

Elderly ridership in Waterbury has not been accurately determined. Reduced fares for the elderly, previously available only during the midday, jumped their share of total ridership from 8-10% to 23% when the program was expanded to all day. It can thus be assumed that elderly ridership is in the area of 25%. The North East Transportation Company provides regular bus service within two blocks of almost all the elderly housing projects in Waterbury.

However, this does not mean that all of the elderly living in these buildings are able to use the service. Often times, the steep Waterbury hills or the physical disabilities of the elderly may limit their use of public bus service. Furthermore, since North East no longer provides evening and Sunday service and Saturday service is more limited, the City's elderly are not able to rely on bus service as their only form of transportation. Friends, relatives, or Waterbury Yellow Cab must serve as a backup means of travel whenever bus service is not available.

Regular bus service is also provided within one block of 18 of the 22 extended care facilities serving the elderly. As a rule, these institution-bound elderly have been infrequent users of public bus service. The difficulties of entering and exiting from conventional buses, physical and mental disabilities, and lack of familiarity with bus routes have limited their use of the bus. However, many of these problems will be corrected when North East receives its new buses designed with low entrance steps, wide doorways, non-skid flooring and special lighting for easier entry and exit. When these new buses are introduced along routes passing by extended care facilities, many of the elderly who have been reluctant to use public transit may be attracted to travel on their own.

In 1974, the Price Waterhouse Company indicated that North East provided excellent coverage of the City with 78% of the population within 1/4 mile of a bus route. However, the Price Waterhouse report also indicated that in October, 1974, the Company was operating several unprofitable routes which should be either discontinued, shortened or offered less regularly. Certain periods of the day, and certain segments of North East's bus routes were felt to be unproductive revenue producers. As can be seen in Table VII, comparison of operating expenses and fare box revenues, there were 3 unprofitable bus routes in October, 1975. CE Maguire, Inc. in its study Short Range Transit Development Program for the CNVR, has recommended that 7 bus routes, including the 3 unprofitable ones, be altered to improve the level of service of the bus system. Starting December 6, 1976 North East adopted three of the bus route changes recommended by Maguire.

Municipally Sponsored Mini Bus Service

The Mini Transit Service

The low income levels and social isolation of many of Waterbury's elderly have made inexpensive forms of independent transportation a pressing social need.

Fortunately, in 1972, just about the time that the City's major bus companies increased their fares from 35 to 50 cents, the City of Waterbury began a free transportation program within the Model Neighborhood to provide for the needs of the elderly, handicapped, economically disadvantaged, and those without other means of transportation. This service began as the Model Cities Red Cross Transportation Service in the spring of 1972 and initially was confined to serving the Model Neighborhood.²⁴ However, by 1974, under the sponsorship of the CNVRPA and as a result of urban renewal in downtown Waterbury, the service expanded to cover most of the city and all of its 18 elderly housing projects.

Today, a recent analysis of the origins and destinations of Mini Transit passengers indicates that though the service is geared to Model Neighborhood residents, it has grown into a more comprehensive city-wide service meeting the transportation needs of the elderly. In September, 1975, slightly over 70% of all non-elderly (i.e., those under 60) users lived in the inner city area (Census Tracts 3501-3505). In contrast, elderly users of the service were scattered throughout nearly every neighborhood of the city with only 36% living in the inner city area. This indicates that the city-wide service provided by Mini Transit is almost exclusively tailored to the needs of the elderly living in the fringe neighborhoods of the city where elderly residents are often more isolated and less mobile than the elderly population in general.

²⁴ Base to Unit Three! Base to Unit Three! The Waterbury Mini Transit Service 1972-1975, CNVRPA, 1975, p. 3.

As of October, 1976, the MiNi Transit Service had 1,475 elderly patrons on file* in its office.²⁵ This figure constitutes approximately 7.4% of the City's elderly population. However, as can be seen from Table IV, in 1975 the MiNi Transit Service had over 10% of all the City's elderly black residents and over 30% of all the City's elderly Spanish-speaking residents on file in its office. Furthermore, in certain geographic areas of the City, such as the inner-city area and Fairlawn, as many as 20% of all the elderly are using the service.**

While there has been some concern that MiNi Transit was duplicating the service provided by the North East bus company and the Waterbury Yellow Cab Company, a survey of 50 MiNi Transit passengers, conducted in August, 1975, tends to indicate that this is not the case. The survey found that many of these passengers are essentially dependent on the service in order to travel about within Waterbury. The survey found that as many as 46% of all the elderly indicated that they did not travel, or traveled only occasionally, during the time that MiNi Transit was temporarily shut down during the month of July, 1975.²⁶ Perhaps more significantly, 78% of the elderly indicated that they do not travel or traveled only occasionally (in a friend's car or by walking) on weekends or during the evenings when MiNi Transit does not operate.²⁷ In contrast, only 64% of all MiNi Transit passengers under 60 years of age indicated that they did not travel at all during the evenings or on weekends. The greater immobility of elderly MiNi Transit riders on weekends and during the evenings, compared to the rest of the service's ridership, suggests

*All the elderly on file in the MiNi Transit Office have used the service at least once during the period October 7, 1974 to September 30, 1976.

**In addition, the MiNi Transit Service has been a popular form of transportation for many of Waterbury's elderly living in the downtown area and in the City's 18 elderly housing projects.

²⁵CNVRPA Survey of MiNi Transit File, October, 1976.

²⁶CNVRPA MiNi Transit Passenger Survey, August, 1975. The survey results might have been considerably different if patrons of MiNi Transit were paying for the service at rates comparable to North East bus fares.

²⁷Ibid.

that the elderly prefer not to travel during these periods. However, when asked if they would use Mini Transit if it were made available on the weekends and during the evenings, as many as 66% said they would use it on weekends and 63% said they would use it during the evenings.

Suburban Mini Bus Service

Though bus service is limited to the City of Waterbury with occasional runs to Watertown and Wolcott, nearly all of the Region's municipalities are provided with more specialized mini bus service geared to meeting the transportation needs of the elderly.²⁸ Only the municipalities of Bethlehem, Beacon Falls and Middlebury are without a municipally-operated mini bus for the elderly. (See Map on page 40)

However, Bethlehem, Beacon Falls and Middlebury will shortly be coordinating with their respective adjoining municipal mini bus programs in Naugatuck and Watertown. Though Bethlehem is currently without a municipally sponsored mini bus for the elderly, the Bethlehem Lion's Club has offered twice a month transportation to elderly residents desiring to travel out-of-town.

In addition, in the municipalities of Cheshire, Naugatuck, Southbury, Waterbury and Woodbury, the elderly are offered other supplementary mini bus services or volunteer transportation services operated by social service groups. During the course of interviewing the directors of municipally sponsored mini buses, it was learned that the elderly are often referred to other organizations within the town when (1) the local mini bus program cannot accommodate their particular transportation need, (2) local mini bus service is unavailable due to repair work, (3) elderly residents wish out-of-town service when no such service is offered, (4) transportation is needed during an evening, weekend or when the municipal mini bus is not in service, or (5) the mini bus service is booked up in advance and is unable to accommodate additional patrons

²⁸ A detailed listing of the Region's Mini Bus Services is provided in the CNVRPA publication, A Consumers' Guide to Transportation in the CNVR.

In Woodbury, the elderly are referred to FISH of Woodbury if the Woodbury Seniors Mini bus is not able to provide them with service. In Naugatuck, back-up service for those with medical needs is provided by the Naugatuck Chapter of the American Red Cross. Southbury residents living in Heritage Village can avail themselves of the Heritage Village Mini Bus if the town's mini bus is not available. In Waterbury, the Mini Transit Service refers clients with medical transportation needs requiring out-of-town, evening or weekend service to FISH of Waterbury. Finally, the Cheshire Mini Bus refers those elderly it cannot service to the American Association of Retired Persons (AARP), the League of Women Voters, or the Junior League. These back-up transportation organizations are not large providers of service but represent an important resource for elderly with special transportation problems or with a need for transportation that is incompatible with the scheduling of local mini bus programs.

Frequency of Service

The need for back-up service is evident since not all of the municipal mini bus services offer out-of-town service on a regular basis or provide seven-days-a-week service. Only the Cheshire Senior Day Center offers service seven days a week and only the Comprehensive Transportation System in Wolcott offers service every day but Sunday. Five suburban mini bus services provide service Monday through Friday generally between the hours of 9:00 a.m. and 5:00 p.m. Although the Four Hills Mini Bus provides service 5 days a week, Thomaston only receives service twice a week due to the fact that the vehicle also provides one day a week service in Litchfield, Harwinton and Morris. The Woodbury Mini Bus provides service only between Tuesday and Friday, and the Southbury Mini Bus provides scheduled service every weekday but Wednesday during which time service is available only by special request. However, none of the mini bus services provide transportation after 5:00 p.m. in the evening. (See Table X)

Out-of-Town Service

Out-of-town service is offered by all town mini buses except the one operated in Naugatuck. However, only six of these nine suburban services provide at least once-a-week transportation to Waterbury. The Cheshire Mini Bus and the Oxford Community Carpool provide infrequent service to Waterbury due to their proximity to the nearby commercial and urban areas of New Haven (in the case of Cheshire) and Seymour and Derby (in the case of Oxford).

Reliability

Ironically, the elderly mini bus services which have been the most popular and most patronized have also experienced the greatest problems with the reliability of their service. Heavy usage of the vehicles, increasing mileage, especially in stop-and-go city driving, and expanded hours of service have been significant causes of vehicle breakdown. Both the MiNi Transit Service in Waterbury and the Cheshire Mini Bus emphasized the nagging problem of vehicle maintenance that has developed as their ridership levels have increased, creating a continuous high demand for transportation throughout the day and week. The Cheshire Mini Bus has been experiencing at least one to three days of downtime (vehicle non-usage) per month while the MiNi Transit Service, operating with five vehicles, has experienced anywhere from 2 to 20 days of vehicle downtime per month over the period July, 1975, to June, 1976. Although operating 5 vehicles, the service has had low vehicle utilization in the winter due to repair and maintenance. The number of vehicles in use in each month of fiscal year 1975-1976 varied from a low of 3.85 in November, 1975, to a high of 4.90 in May, 1976. Watertown and Wolcott have also experienced occasional problems with their vehicles. However, in the case of Wolcott, the town has supplied a back-up vehicle that can be used for either supplementing or replacing the service provided by the municipal mini bus. Watertown has compensated for its lack of a back-up vehicle by renting the Waterbury YMCA's van when its vehicle is out of service. The directors of the mini buses in Prospect, Southbury,

Woodbury and Naugatuck indicated that equipment failures were also a problem. If such failures were to occur, however, they would not be able to maintain service since none of these towns currently operates with more than one mini bus. Indeed, a serious accident experienced by the Woodbury Mini Bus in October, 1976, led to a temporary discontinuation of the service until they were able to rent a station wagon from a local dealer.

Physical Equipment

In October, 1976, the ten municipal mini bus services in the Region were operating with a total of 11 vans and 3 station wagons. The Waterbury MiNi Transit service had 5 of these vehicles with a fleet of three 1972 vans and two 1973 station wagons. With the exception of the Oxford Community Carpool which utilizes a station wagon, all of the Region's municipal mini bus services are operating with standard 12 passenger Ford, Chevrolet, Plymouth or Dodge vans. As can be seen in Table XI, the oldest municipal mini bus is a 1971 Dodge van operated by the Naugatuck Dial-a-Ride. However, five of the Region's elderly mini buses recorded over 50,000 miles in October, 1976. These vehicles were operated by the most popular services located in the urbanized portion of the Region, including the Cheshire Seniors Mini Bus, Naugatuck Dial-a-Ride, Watertown Mini Bus and two of Waterbury's MiNi Transit's Ford vans.

Though the service provided by the municipal mini buses is for all elderly residents, the architectural barriers of the vans used by most of these services have limited their use to those who are ambulatory and require minimal assistance in entering and exiting the vehicle. Only the Waterbury MiNi Transit Service and the Oxford Community Carpool operate with station wagons. The MiNi Transit Service utilizes two station wagons to supplement the transportation provided with the organization's three vans in order to accommodate wheelchair patients and those clients who are unable to negotiate the high step of the vans. Neal Jones, director of the MiNi Transit Service, estimates that 10% of their clients use the station wagon because

of difficulty in getting into the vans. Most of the mini bus services, including the MiNi Transit Service, have either modified their vehicles by adding an extra step or have carried a stool that can be placed on the ground at the time passengers enter or exit the vehicles. However, by themselves, these retractable steps have not been sufficient to provide a safe entry or exit into the vehicle. The driver's assistance is required since the elderly are often unsteady or the step is too narrow to step on when they attempt to exit from the vehicle.

The three largest services, MiNi Transit, the Cheshire Seniors Mini Bus and the Watertown Mini Bus have been operating with two-way radios for several years. In contrast, the elderly transportation services in Southbury, Wolcott and the Four Hills area (Thomaston) have only acquired two-way radios within the past year. The remaining four towns served by a municipally sponsored mini bus operate without two-way radios since there has not been sufficient demand for service nor have they experienced unpredictable changes in scheduling that would warrant the convenience of constant contact between the driver and dispatcher.

Management Practice

There are a variety of management arrangements utilized by the municipally sponsored mini bus services. Management of these services varies from volunteer drivers, dispatchers and administrators in Oxford, to full-time paid drivers, secretarial and administrative staff in the MiNi Transit Service (see Table XII). However, most towns manage their mini bus program through the services of a volunteer director (usually the chairman of the Commission on Aging) and a paid dispatcher operating out of the town hall or the senior center. The advantage of operating in a town hall or senior center is that secretarial or coordinating staff attached to the senior center or town hall is able to provide "free" dispatching, scheduling and secretarial assistance to the mini bus program. In the case of Wolcott, the mini bus is operated out of the office of the Mayor's assistant who is both the director of the service and its dispatcher. When he is performing

other duties, the Mayor's secretary is available to receive incoming calls for service and handle the dispatching. This administrative arrangement appears to work well since requests for service require only the part-time attention of one person. Similarly, the Cheshire Mini Bus is operated out of the Senior Day Center with the Center's coordinator responsible for the dispatching and bookkeeping duties of the mini bus program. In effect, these mini bus programs have been able to minimize administrative costs by piggybacking the management of the mini bus program upon the shoulders of local government or senior center staff. Where such arrangements are not feasible, these services are managed by the driver or the dispatcher within their home. Both Southbury and Thomaston schedule and dispatch their services in the private homes of the dispatcher. Finally, the MiNi Transit Service is administered by a director, administrative assistant and secretary/dispatcher with technical assistance and transportation monitoring and planning provided by the CNVRPA. The larger staff of MiNi Transit has allowed it to perform more careful monitoring and review of its transportation operating trends. Monthly monitoring of mileage, trip purpose, cost/passenger, cost/mile, and detailed demographic data on passengers is performed by MiNi Transit. Other town mini buses may monitor unduplicated clients, passenger trips or budget information as required by the Northwest Connecticut Agency on Aging, but none have monitored cost/passenger trip or cost/mile as a means of evaluating the efficiency of their service.* Furthermore, with the exception of MiNi Transit and the Cheshire Mini Bus Service, none of the directors of these services have developed fleet replacement schedules in order to anticipate future capital expenditures. In part, the fact that most of the administrative staff in charge of these special transportation programs are performing these management duties as a sideline activity, explains their limited familiarity with the planning and management needs of their service.

*This task has been performed by the Northwest Connecticut Agency on Aging for each of its mini bus services. However, one of the difficulties in determining the cost of service for elderly mini buses is that administrative costs incurred by senior center or town hall staff are not always included in the overall operating costs of the service.

Ridership

As of October, 1976, the ten municipally sponsored mini buses served approximately 8% of the total elderly population (60 and over) in the CNVR and provided over 100,000 passenger trips per year.

The three largest specialized transportation services for the elderly are in the Region's urbanized areas covering Waterbury, Watertown and Cheshire. The Mini Transit Service provided 48,391 passenger trips in fiscal year 1975-1976; Naugatuck's mini bus provided 10,782 trips; and Cheshire's mini bus provided 12,500 trips. With the exception of the Watertown Mini Bus, the remaining mini bus services in the Region made less than 7,000 passenger trips a year during fiscal year 1975-1976.

(See Table XIII)

As can be seen in the Table below, the Region's newest mini bus services have experienced the most dramatic increases in ridership with Wolcott, Southbury and Prospect doubling to tripling their levels of passenger trips over the previous year. The large increases in ridership reflect increased publicity for the service and a growing utilization of these mini buses for routine transportation needs.

Comparison of Ridership of Municipal
Mini Bus Services: 1974-1976

	<u>Fiscal Year 1974-75</u>	<u>Fiscal Year 1975-76</u>	<u>Numerical Change</u>	<u>Percent Change</u>
Waterbury Mini Transit	36,473	48,391	11,954	32.8%
Watertown	9,410	9,486	76	0.8%
Naugatuck	10,590	10,782	192	1.8%
Cheshire	8,676	12,500	3,824	44.0%
Wolcott	2,577	6,459	3,882	150.6%
Woodbury	2,589	5,146	2,557	98.7%
Southbury	2,284	5,166	2,882	126.1%
Prospect	1,160	3,532	2,372	204.4%
Four Hills (Thomaston)	2,288	3,000	1,712	31.0%
	<u>76,011</u>	<u>103,039</u>	<u>28,451</u>	<u>37.4%</u>

However, ridership has stabilized for Naugatuck's Dial-a-Ride and Watertown's Mini Bus. Both of these services experienced little if any increase in ridership over

the period 1974-1976 probably because these services are running at nearly peak capacity with their current vehicles.

There has also been a dramatic rise in the number of elderly using mini buses in the last year. In October, 1975, there were 2,092 elderly in the Region who used municipal mini bus services but by October, 1976, there were 2,774 elderly mini bus users. The MiNi Transit Service experienced the largest increase in users of all the Region's mini buses with over 500 new elderly riders placed on file within the period October, 1975 to October, 1976. Although Waterbury's MiNi Transit carries more elderly persons than any other mini bus in the Region, it serves a slightly smaller percentage of its elderly population than the suburban mini buses. As can be seen in Table XIV, approximately 9% of all the elderly in the suburbs have made use of mini bus service at one time or another while only 7.4% of those in Waterbury have used MiNi Transit. The disparity between the percentage of elderly using MiNi Transit and the percentage of elderly using mini buses in the Region is largely due to the greater availability of public transportation in Waterbury.

As can be seen in Table XV, with the exception of Waterbury's MiNi Transit Service and the Comprehensive Transportation System in Wolcott, which gear their services to the medical needs of their clients, most of the Region's mini buses provide relatively few of their passengers with medical transportation. In general, the Region's suburban mini buses have allowed their services to be used primarily for shopping and recreation; where Title VII nutrition program are functioning, mini buses have also provided the elderly with transportation to feeding sites.

Comparison of Unduplicated Elderly Users of Municipal Mini Bus Services: 1974-1976

	<u>October, 1975</u>	<u>October, 1976</u>	<u>Numerical Change</u>	<u>Percent Change</u>
MiNi Transit Total	2,020	3,100	1,080	53.3%
MiNi Transit Elderly	962	1,475	513	53.3%
Cheshire	115	150	35	30.4%
Naugatuck	210	210	0	0.0%
Oxford	26	21	-5	-19.2%
Prospect	66	112	46	69.6%
Southbury	170	184	14	8.2%
Thomaston	95	164	69	72.6%
Watertown	298	338	40	13.4%
Woodbury	150	150	0	0.0%
TOTAL	2,092	2,804	712	34.0%

Cost and Operating Efficiency

Largely due to increasing ridership and expanded service, nearly all of the Region's elderly mini bus programs have become more efficient than in previous years. As can be seen in the Table below, between 1974-1975 and 1975-1976 the cost/passenger trip dropped for four of the Region's mini bus services.

The most economically efficient services are those located in the urbanized portion of the Region. The Naugatuck Dial-A-Ride, Waterbury's Mini Transit Service, the Watertown Mini Bus and the Cheshire Seniors Mini Bus have had the lowest operating cost per passenger trip.

The suburban mini buses have been somewhat less efficient due to their lower level of ridership, longer distances traveled per passenger trip and their frequency of out-of-town excursions. These factors have resulted in costs per passenger trip that are two or three times those experienced by mini buses operating in the urbanized portion of the Region. In the case of the Four Hills Mini Bus serving Thomaston, Harwinton, Litchfield and Morris, lack of trained management, insufficient intertown coordination and leadership and limited promotion of the service led to a 26% increase in the cost per passenger trip made in fiscal year 1975-1976 compared to the previous year. In order to improve the efficiency and level of services in these four towns, management of the Four Hills Mini Bus is currently being reorganized under the direction of the Northwest Connecticut Agency on Aging. Furthermore, if the service is not able to increase its ridership level and develop a working system for the four towns, there may be a need to limit intertown coordination to the two nearest towns or transfer Thomaston into the Watertown mini bus program and allow Litchfield, Harwinton and Morris to retain the Four Hills Mini Bus.

Comparison of Cost per Passenger Trip
On Municipal Mini Bus Services: 1974-1976

	<u>1974-</u> <u>1975</u>	<u>1975-</u> <u>1976</u>	<u>Numerical</u> <u>Change</u>	<u>Percent</u> <u>Change</u>
Waterbury MiNi Transit	\$1.65	\$1.34	- .31	-18.7
Watertown	1.20	1.43	+ .23	+19.1
Naugatuck	1.00	0.99	- .01	- 1.0
Cheshire	1.22	1.05	- .17	-13.9
Wolcott	4.07	2.68	-1.39	-34.1
Southbury	1.97	2.05	+ .08	+ 4.0
Prospect	2.67	2.92	+ .25	+ 9.0
Four Hills (Thomaston)	2.47	3.10	+ .63	+25.5

Naugatuck's Dial-A-Ride and Waterbury's MiNi Transit Service have restricted their service to within municipal boundaries. Consequently, these two services have had a slightly higher cost/mile than suburban mini buses providing frequent lengthy out-of-town service to Waterbury and other locations in the State. The mini bus operated by Comprehensive Transportation System in Wolcott had the lowest cost per mile in fiscal year 1975-1976. Unlike other mini bus services, Comprehensive Transportation System is operating 6 days a week taxi type service into Waterbury. Whenever anyone wishes to travel to the CBD or the mall, this service is available regardless of the load factors of the vehicles. (See Table on following page)

As can be seen from Table XVI, overall expenditures for mini bus services varied tremendously during fiscal year 1975-1976. The major reasons for the large variation in expenditures are (1) the number of days and hours of service, (2) the number of full-time paid staff, (3) the number and condition of vehicles and (4) the level of out-of-town service.

The Naugatuck Dial-A-Ride, the MiNi Transit Service and the Cheshire Seniors Mini Bus

have reduced expenditures by eliminating or curtailing out of town service. However, the MiNi Transit Service, with 5 paid drivers and 3 paid office staff, had a budget that was 3 to 5 times larger than any of the Region's other mini bus services which typically have only one to two paid staff persons. Nonetheless, despite higher expenditures, the MiNi Transit Service was more efficient in terms of cost per passenger trip than all the mini bus services in the non-urbanized portion of the Region. This has been largely attributable to the efficiency of the program's routing system and its high level of ridership.

Comparison of Cost Per Mile
On Municipal Mini Bus Services: 1974-1976

	<u>1974-1975</u>	<u>1975-1976</u>	<u>Numerical Change</u>	<u>Percent Change</u>
Waterbury MiNi Transit	.91	.82	-.09	-9.8%
Watertown	.62	.67	+.05	+8.0%
Naugatuck	.73	.74	+.01	+1.3%
Cheshire	.57	.51	-.06	-10.5%
Wolcott	.36	.43	+.07	+19.4%
Southbury	.47	.57	+.10	+21.2%
Prospect	.73	.62	-.11	-15.0%
Four Hills (Thomaston)	.43	.86	+.13	+30.2%

Sources of Funding

Four of the Region's mini buses for the elderly are receiving funds through Title III of the Older Americans Act with matching funds provided by the municipality. (See Table XVII) The mini buses in Wolcott, Southbury, Prospect, and Thomaston are in their third year of Title III funding and are expected to be entirely supported by their towns by October, 1977.

Wolcott, Thomaston and Southbury have also received a minimal level of financial support from contributions made by their patrons. In the case of Wolcott, passbooks

have recently been issued, costing \$2.50 for ten round trips. These passbooks are not only providing the service with additional revenues, they are also allowing the elderly a sense of self dignity in paying their own way.

The Woodbury, Cheshire, Naugatuck and Watertown mini buses are entirely funded through municipal revenues. In addition, Cheshire and Watertown receive a minimal level of financial support through contributions of patrons. As can be seen in the table below, reported contributions from elderly patrons on the four elderly mini buses, averaged anywhere from 6¢ to 11¢ per one way trip. Though these contributions represent a minimal cost to patrons, they have defrayed up to 10% of the total operating costs in Cheshire and nearly 5% of the cost for Southbury Seniors Mini Bus.

Contributions Received by Municipally
Sponsored Elderly Mini Buses: 1975-1976

	Total Contribution	Average Contribution Per Passenger Trip	% of Total Operating Cost Defrayed Through Contributions
Cheshire Seniors Mini Bus	\$1,320	10.5¢	10.0%
Four Hills Mini Bus	\$ 337	11.2¢	3.6%
Southbury Mini Bus	\$ 500	9.6¢	4.7%
Comprehensive Trans. (Wolcott)	\$ 401	6.2¢	1.9%

SOURCE: Northwest Connecticut Agency on Aging, and CNVRPA staff work, December, 1976.

The Oxford Community Car Pool operates with a station wagon that was purchased with general revenue sharing funds and utilizes 27 volunteers to drive, dispatch and manage the service. The Region's largest service, MiNi Transit, is funded through Housing and Community Development Act categorical funds. Since these funds may not be available after June 30, 1977, the service may be required to seek alternative sources of support. Based on an August, 1975, survey of MiNi Transit users and an October, 1976, survey of users of the town mini buses in Wolcott, Watertown, Prospect, Southbury, Naugatuck and Woodbury; it appears that these municipally sponsored

services could easily increase their revenues by charging a fare. In the six suburban towns surveyed, 83% of the respondents riding the mini buses at the time of the survey said they would be willing to pay for the service. Approximately 80% said they would pay 25 cents for each one way trip while 48% were willing to pay up to 50 cents for each one way trip. Mini Transit riders were asked if they would be willing to pay 50 cents for each round trip; 83% of all who answered and 74% of the elderly who answered, would continue to ride at that price. When asked if they would travel by Mini Transit if the service was provided at a cost of \$1.80 for each round trip, which was the approximate cost for the service, only 22% of all respondents and 20% of the elderly said they would be willing to pay that amount.

The only mini bus services included in the users' survey which charged a fare at the time of the survey were Wolcott's and Watertown Dial-A-Ride programs. Books of tickets with each individual one way ticket costing 12.5¢ were sold to the senior citizens, beginning during the same week in which the survey was taken. Although it was too soon in the fare program to draw any certain conclusions, both the driver and the dispatcher felt that ridership was at generally the same levels as it had been before a fare was charged.

Consumer Attitudes on Mini Bus Service

During the months of September and October, 1976, 100 riders of the town mini buses in Naugatuck, Prospect, Southbury, Watertown, Wolcott and Woodbury were surveyed to determine their transportation habits and needs.

It is obvious from the surveys that the local mini buses fulfill an important and otherwise unmet transportation need for many of the elderly. Nearly two-thirds of those riding the six local mini buses said they simply would not be able to travel if the services were not available.

Possible ways of improving mini bus service were investigated in the surveys of the suburban mini buses. Nearly all of the riders expressed their gratitude for the

service as it was then provided and said they were satisfied with the existing operations. Questions asked of local mini bus riders about the comfort, convenience, travel time, punctuality and reliability of their service produced overwhelmingly favorable ratings. Three out of every four users of these six mini buses rated them as very comfortable, 91% rated them as very convenient and 83% said that travel time was very quick and that they always reached their destination on time.

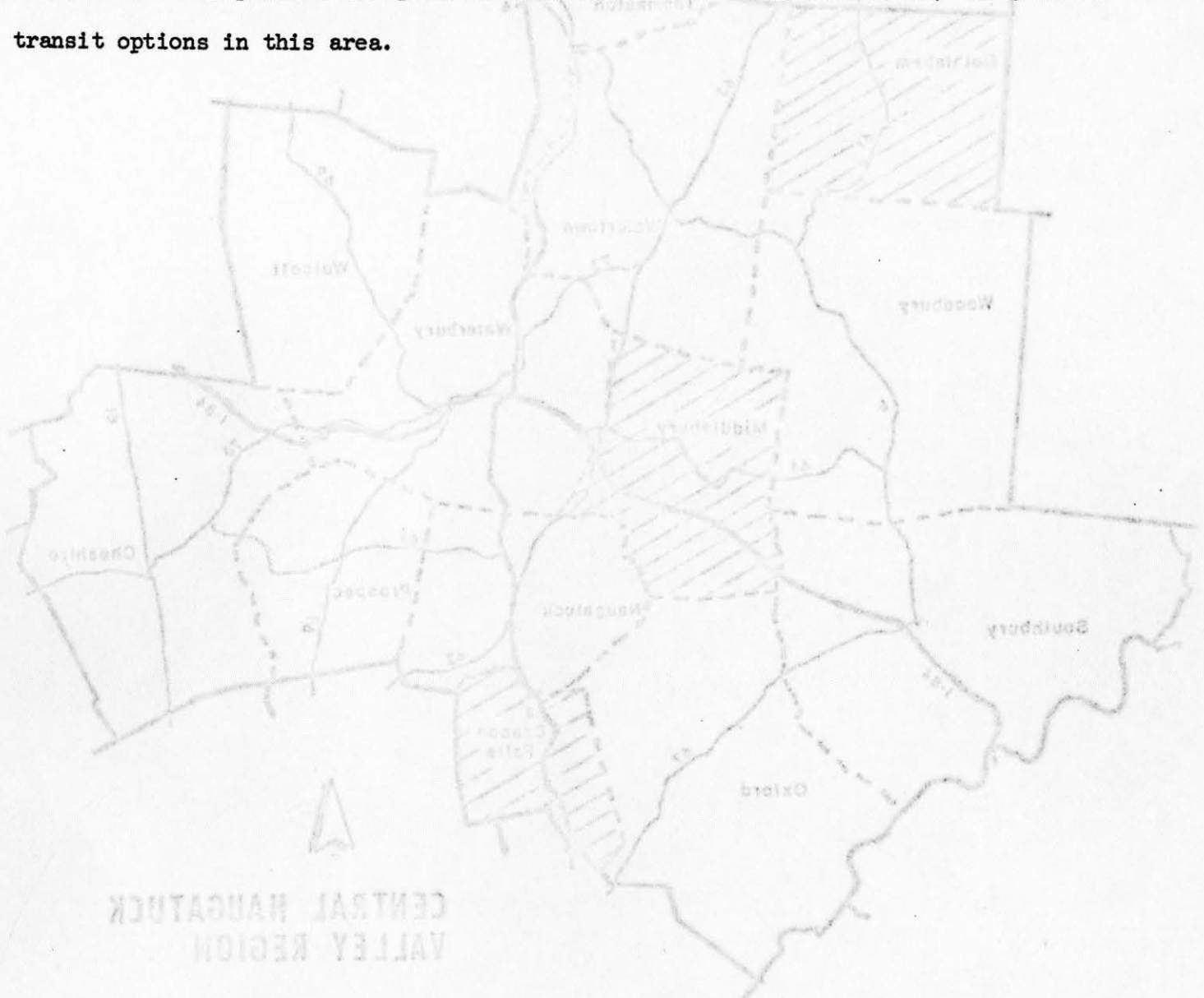
Significantly, as many as 65% of the elderly using the town mini buses were not averse to seeing the service expanded to serving non-elderly residents of the community. Exactly half of the respondents also said they would like to see weekend service added. These riders were not questioned about their need for evening service, but random comments indicated that on special occasions, such as town meetings or meetings of popular social organizations, evening service might be widely utilized. Most of the passengers apparently feel that the buses as they are currently equipped are adequate for their needs; less than half of respondents to this question saw a need for lower steps for entry and less than 10% of the respondents felt the buses needed to be accessible to wheelchairs.

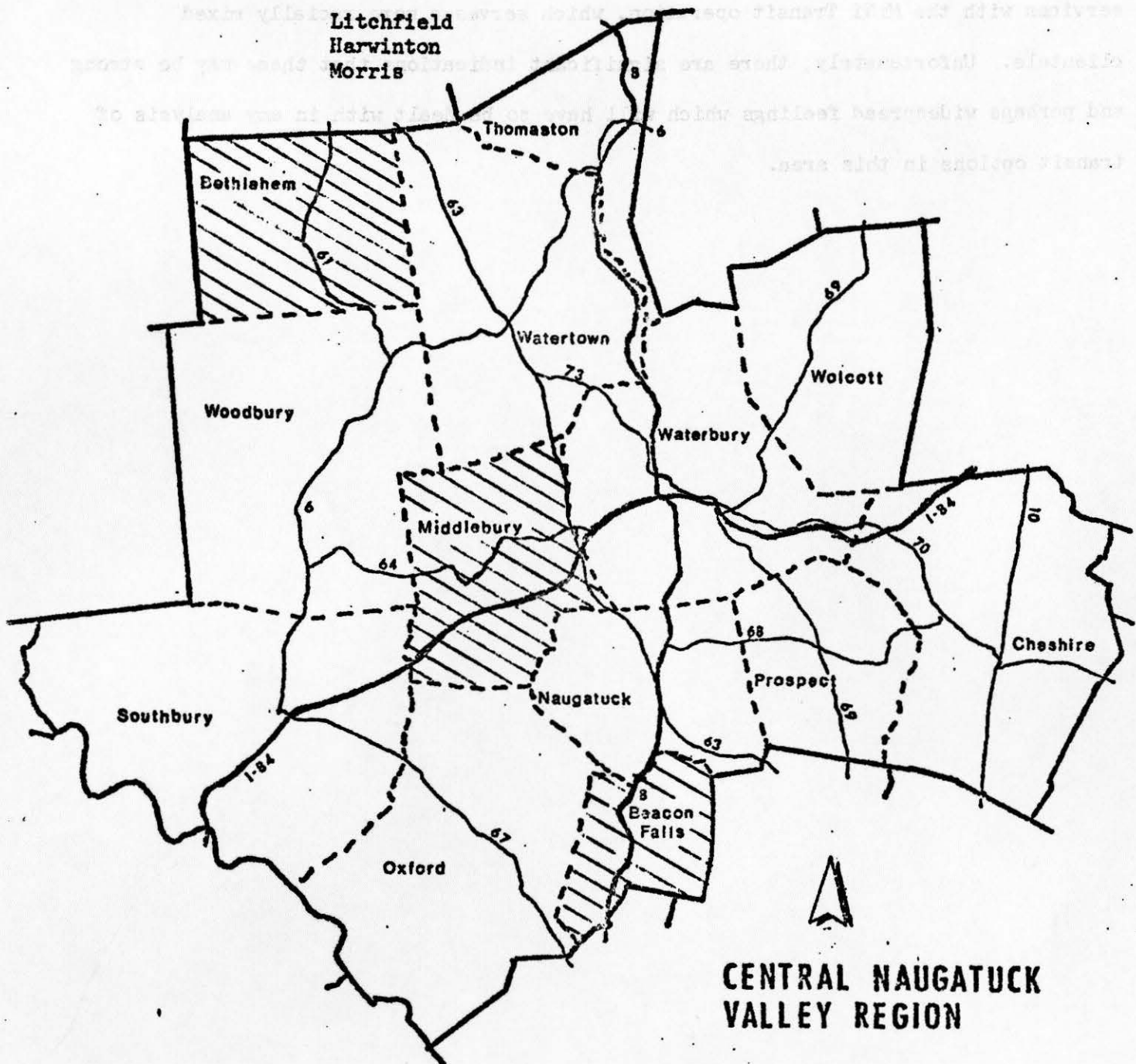
Some relatively subjective conclusions were also reached in the course of conducting the on-board surveys. Users of the local mini buses, for example, were nearly unan-

imous in their appreciation of the social aspects of the service. Most of those surveyed were regular riders who saw their trips as opportunities to spend time with friends, look at the scenery and generally enjoy a change in pace from confined indoor routines. Drivers knew passengers by name and were kept up-to-date on the illnesses, the family affairs and the big and little events in the lives of their riders. Although this aspect was not formally tabulated in the surveys, it was obvious that the local mini bus services fulfill some important social and psychological needs, as well as the transportation requirements of their riders.

This sense of camaraderie, however, had some negative aspects as well. It was specifically noted in at least three situations that any attempt to integrate the

almost entirely white ridership of the local mini buses might very well meet with resistance from current users. CNVRPA staff members heard of initial hostility to occasional, lone black riders; of relief that more black elderly residents did not use the service; and of predicted resistance to any attempts to coordinate those services with the MiNi Transit operation, which serves a more racially mixed clientele. Unfortunately, there are significant indications that these may be strong and perhaps widespread feelings which will have to be dealt with in any analysis of transit options in this area.





MUNICIPALITIES WITH MINI-BUS SERVICE FOR THE ELDERLY

Shaded areas not served by mini-buses

March, 1977

Social Service Transportation Systems

Transportation has increasingly become a more important facet of the social services offered by agencies in the Central Naugatuck Valley Region. Transportation programs offered by the Region's social service agencies have been developed for a variety of reasons. Decreasing convenience of public bus service, increasing agency recognition of the inter-relationship between transportation, health, employment, and education and increasing levels of federal support for social programs that have transportation components have encouraged a rapid proliferation of specialized transportation services. The need for these specialized transportation services has been reinforced by a parallel trend as well: increasing concern for the social and economic problems of the institutionalized and homebound members of our society.

The transportation services offered by the 28 social service agencies in the CNVR providing transportation for their clients vary as greatly as do the agencies themselves. The transportation services offered by nine of the agencies are an integral component of their overall agency program. These include the YMCA, Pearl Street Neighborhood House, Western Connecticut Jewish Community Center, Puerto Rican Youth Organization, the Retired Senior Volunteer Program, the Naugatuck Chapter of the American Red Cross, the Council of Governments' Meals-on-Wheels Program and Fish of Waterbury and Woodbury. The remaining 19 agencies provide transportation as an ancillary service, to ensure client attendance at school, job training, therapy or clinic programs or as a special service aimed at providing mobility from inaccessible locations. The Table on the following page identifies the 28 social service agencies surveyed by the CNVRPA during the months of October and November, 1976. Of the 28 agencies surveyed twelve had clients with physical handicaps and five served those with mental handicaps. The elderly were served by 14 agencies, pre-schoolers by three, youth by eight, economically disadvantaged by four, veterans by two, and adults by seven. Community Services of New Opportunities for Waterbury, Inc. (NOW) had the broadest clientele.

Summary of Agency
Activities, Clients
Served and Transpor-
tation Services
Offered, 1976

Type of Client	American Cancer Society	American Association of Retired Persons	American Red Cross	Bethlehem Lions Club	Carlton Towers & Westview Apartment	Dept. of Social Services	Div. of Vocational Rehabilitation	Easter Seal Rehabilitation	Elderly Health Screening	Heritage Village	Headstart	League of Women Voters	Morris Foundation	Jr. League	Puerto Rican Youth Organization	Pearl St. Neighborhood House	Retired Senior Volunteer Program	Waterbury Regional Center	Waterbury Association for Retarded Citizens	Waterbury CETA	The YMCA	United Cerebral Palsy	Western Conn. Jewish Community Center	Waterbury FISH	Woodbury FISH	Meals-on-Wheels	NOW, Inc. (Community Services & NYS	TOTAL	
Mental Handicap	X																												5
Physical Handicap	X																												12
Elderly		X	X	X	X		X	X	X	X		X	X	X										X	X	X	X	X	14
Pre-School																													3
Economically Disadvantaged																													
Veterans			X												X	X													4
Youth																													2
Adults	X														X	X	X	X	X	X	X	X	X	X	X	X	X	X	8
																													7
Agency Program																													
Clinical/Medical	X	X	X			X	X	X	X	X	X	X	X	X		X								X	X	X	X	X	14
Day Care																													2
School																													4
Job Training																													5
Elderly Programs																													7
Youth Programs				X																									6
Emergency Service	X	X																											0
Recreation																													8
Nutrition																													2
Shopping					X																								2
Type of Service																													
Own Vehicles			X		X			X	X	X	X	X	X	X		X													17
Contract						X	X	X	X	X																			5
Volunteered Services	X	X	X	X							X	X		X															9

Source: CHVRPA Staff work, December, 1976.

Exactly half(fourteen) of the agencies had clinical or medical functions, eight offered recreational programs, nine had emergency services, seven had elderly programs, six had youth programs, and five had job training programs.

The 28 social service agencies provide varying levels and types of transportation for their clients. Twelve of the agencies provide service using their own vehicles and personnel, and two use their own vehicles but utilize volunteer staff. Three agencies provide service on a contract basis only, owning no equipment and another three agencies utilize both their own vehicles and contract for service with established public carriers. Finally, seven agencies provide service through volunteered vehicles, staff time and money provided by members of the community, other social service organizations, or a transportation carrier.

Areas of Service

The transportation services offered by these agencies focus on the City of Waterbury and its surrounding urbanized area. Twenty-one of these agencies are located in Waterbury, four in Cheshire, one in Naugatuck, one in Southbury and one in Woodbury.

The American Cancer Society, the Connecticut Dept. of Social Services, Easter Seals Rehabilitation Center of Greater Waterbury, Inc., United Cerebral Palsy, the Waterbury Association for Retarded Citizens, Morris Foundation, Fish of Waterbury, the Naugatuck Chapter of the American Red Cross and Community Services of NOW, Inc. are the most prominent and pertinent to immobile residents of the Region since they provide a limited amount of transportation to elderly for medical treatment.

Unlike the Region's elderly mini buses which are providing local service for town elderly, some of the vehicles operated or sponsored by Waterbury social services provide a regional service. The American Cancer Society, the Morris Foundation and the Department of Social Services provide transportation to the entire Central Naugatuck Valley Region, while United Cerebral Palsy serves a three town area, Easter Seals Rehabilitation Center of Greater Waterbury, Inc. serves a four town

**SPECIALIZED MINI TRANSIT SERVICES IN THE CNVR
MARCH, 1977**



**CENTRAL NAUGATUCK
VALLEY REGION**

Agency

- | | |
|---|---|
| 1. American Cancer Society | 13. Carlton Towers |
| 2. Bethlehem Lions Club | 14. Community Services (NOW, Inc.) |
| 3. Conn. Dept. of Social Services | 15. Pearl Street Neighborhood House |
| 4. Easter Seal Rehabilitation Center | 16. Puerto Rican Youth Organization |
| 5. FISH of Woodbury | 17. Waterbury Girls' Club |
| 6. FISH of Waterbury | 18. YMCA |
| 7. Heritage Village Mini Bus | 19. Retired Senior Volunteer Program |
| 8. Morris Foundation | 20. Headstart |
| 9. United Cerebral Palsy | 21. Neighborhood Youth Services |
| 10. Wtby. Assoc. of Retarded Citizens | 22. CETA |
| 11. Western Conn. Jewish Community Center | 23. Naugatuck Chapter of the American Red Cross |
| 12. Elderly Health Screening | |

area and FISH of Waterbury serves a five town area surrounding and including Waterbury. Though these services are infrequently used by most elderly, they do offer transportation for special medical purposes in the three municipalities of the Region currently without a municipally operated mini bus. (See map on page 45)

However, the majority of the social service agencies are not only located in Waterbury but have limited their transportation programs to Waterbury residents. Such social service agencies as Headstart, Neighborhood Youth Services, Pearl Street Neighborhood House, Puerto Rican Youth Organization, Waterbury CETA, the Waterbury YMCA, Retired Senior Volunteer Program and the Western Connecticut Jewish Community Center have client centered transportation programs which are almost exclusively for Waterbury residents.

Frequency of Service

These transportation services, unlike the elderly mini buses, tend to be more flexible in their hours of service, coinciding with agency programs and staff needs. Furthermore, these vehicles receive considerable use from staff members for non-client transportation purposes. The Naugatuck Chapter of the American Red Cross utilizes its vehicle for carrying blood, the Elderly Health Screening Service uses its vehicles to transport its health equipment to screening sites, Waterbury CETA Administration principally uses its vehicles as staff cars but does assist clients who have difficulty reaching job interviews and the Morris Foundation utilizes its vehicles for staff needs and shopping when they are not being used for emergency transportation.

As a result of the multiplicity of uses made of these agency vehicles, the unpredictable need for their use, and the wide geographic area of service offered by some agencies, few if any were able to imagine any advantages that might accrue from contracting out their transportation service or sharing their vehicles with other agencies. The idea of contracting out their transportation program appealed to most

agencies in theory, but in practice few could imagine how they could operate without an agency vehicle immediately on hand at any time of day.

Indeed, as can be seen by the transportation schedules offered by Neighborhood Youth Services, NOW, Inc., the Waterbury YMCA, Pearl Street Neighborhood House, Morris Foundation and the Western Connecticut Jewish Community Center, these vehicles are available or can be made available through arrangement from 9:30 a.m. to as late as 11:00 p.m. or in some cases 24 hours a day. (See Table X) However, most of these agencies use their vehicles during the staff working hours between 9:00 a.m. and 5:00 p.m. unless special out-of-town trips are arranged or night or evening programs are planned.

Physical Equipment

The 17 social service organizations identified as having their own vehicles, are operating with a total of 42 vehicles. Five of these are school buses, 18 are vans, 11 are station wagons and 8 are sedans. In addition, seven agencies utilized the volunteer skills and vehicles of over 180 individuals. (See Table XI) The majority of these organizations operate with 12 passenger vans; however, those providing transportation for educational purposes (Headstart and Pearl Street Neighborhood House) utilize school buses and those which principally use their vehicles for staff purposes (the Division of Vocational Rehabilitation) have sedans and station wagons. Table XI indicates that Pearl Street Neighborhood House, United Cerebral Palsy, Easter Seal Rehabilitation Center of Greater Waterbury, Inc. and NOW, Inc. have a total of 8 vehicles with over 50,000 miles each in October, 1976.

Management Practice

Unlike municipal mini bus services which are generally operating with volunteer directors, social service agencies' transportation programs are managed by paid staff whose principal responsibilities are usually in other non-transportation matters (See Table XII). The director of the Easter Seal Rehabilitation Center

indicated that his staff as a whole works approximately one full day per week on transportation related matters. United Cerebral Palsy transportation staff is composed of 2 drivers and 2 bus aides who each work 13 hours per week providing transportation, but whose principal responsibilities are teaching and custodial work. NOW, Inc. manages six different transportation services including RSVP, Headstart, Neighborhood Youth Services, Adult Redirection, Community Services and its winterization program with 6 different coordinators and more than 6 different drivers; Morris Foundation utilizes nine different staff members including counsellors, resident managers, administrative assistants and a placement specialist to drive their vehicles; and Waterbury CETA employs three job developers and one field representative as part-time drivers for persons needing transportation to job interviews. A similar level of staff involvement in transportation was found in the Waterbury YMCA and the Waterbury Regional Center (WRC). The YMCA has 8 different employees who are utilized as part-time drivers while the WRC has 30 staff persons who may be called upon to transport any of their clients but predominately it is used for residents of their Cheshire and Bristol facilities.

However, five organizations, FISH of Woodbury, FISH of Waterbury, American Cancer Society, the Heritage Village mini bus and the Naugatuck Chapter of the American Red Cross utilize the skills of 150 volunteer drivers to provide transportation. In the case of FISH of Woodbury and Waterbury, the management of the service is also in the hands of volunteers, while Red Cross, American Cancer Society and Heritage Village manage their service through paid staff persons. Some of these volunteer organizations have experienced difficulties with their scheduling systems and in recruiting persons to provide transportation. American Cancer Society, FISH of Woodbury and Waterbury and the Naugatuck Chapter of the American Red Cross each indicated that insufficient or unpredictable volunteer help has at times curtailed service or forced the more dependable volunteers to work additional hours. As can be seen in the table on the following page, with the exception of the Heritage Village mini bus which provides group travel, the American Cancer Society volunteers

and volunteers of FISH of Waterbury are offering the greatest level of free service. These volunteers carried more passenger trips per year than the volunteers working for the Naugatuck Chapter of the American Red Cross or FISH of Woodbury. However, increasing demands for transportation along with an increasing level of service provided by each volunteer has led to a shortage of manpower and periodic curtailments of service. In order to ensure service on a regular basis, these organizations have generally over-recruited volunteers so that no one is required to contribute too much of their own time or money.

Level of Volunteer Transportation Services Available
in the CNVR: 1975-1976

	<u>Total Volunteer Driving Staff</u>	<u>Annual Passenger Trips Per Year</u>	<u>Passenger Trips Carried Per Volunteer Per Year</u>
American Cancer Society	25	2,080	83.2
American Red Cross	35	1,750	50.0
Heritage Village	8	4,370	546.0
FISH of Waterbury	39	2,400	61.5
FISH of Woodbury	43	1,000	23.2
TOTAL	150	11,600	77.3

Source: CNVRPA staff work, December, 1976.

Ridership

Despite the fact that the Region's social service transportation systems are not in the business of providing full-time transportation, as a group they provided more passenger trips and served more unduplicated clients than the Region's mini buses for the elderly. In fiscal year 1975-1976 an estimated 108,438 passenger trips were made by 4,967 different clients of 25 social service agencies located within the Region. (See Table XIII) Most of these trips were made within Waterbury since the majority of these agencies provide service to clients who are Waterbury residents. Significantly, 16 out of 23 social service agencies surveyed or nearly 70% of the

total, stated that they had been faced with an increasing number of clients desiring the use of their service in fiscal year 1975-1976 compared to prior years. Agencies pointed to a variety of factors responsible for their increasing caseload of clients needing transportation, including recent progress made toward the deinstitutionalization of the handicapped, increased awareness of the availability of social service transportation (as in the case of FISH of Woodbury and American Cancer Society), increased school enrollments (as in the case of United Cerebral Palsy and Pearl Street Neighborhood House) and expansion of recreational programs and trips offered to clients (Waterbury YMCA, and Western Connecticut Jewish Community Center).

Cost and Operating Efficiency

The true costs of operating social service transportation programs are far higher than the estimates made by most social service agencies. Social service agencies often fail to include the administrative cost of running the program, the staff time spent driving their vehicles, or to allocate a portion of the agency's rent, utilities or telephone bills to the transportation component of their service.

Table XVII presents a complete listing of the transportation costs of these organizations and their sources of funding. In fiscal year 1975-1976 these 25 organizations initially indicated they spent a total of \$369,115 for direct transportation operating costs. However, only five of these organizations stated that their administrative budget was included in the total operating cost. Not surprisingly, most of these organizations were unable to quantify all of the administrative costs of their program due to the fact that transportation is mixed in with other duties of the organization's staff.

In November, 1976, a follow-up survey was conducted of the 16 social service agencies which had not fully quantified all of their administrative or operating costs and were managing their service with paid staff. The survey disclosed that these 16 organizations had actually spent an additional \$89,267 on the administration of

Their transportation programs which they had not accounted for in their preliminary transportation budgets submitted to the CNVRPA.

In effect, the true cost of operating these 16 transportation programs was \$277,382 or 47.5% greater than the \$188,115 initially submitted by these agencies. As can be seen in Table XVIII, unaccounted administrative costs ranged from 15% to 650% of the original estimates of total operating costs. In part, the wide range in unaccounted administrative costs reflects the fact that drivers' salaries were sometimes included as operating expenses by some agencies while other agencies lumped these costs under administrative expenses. When unaccounted administrative costs are included as part of the total cost of providing transportation the true cost of operating social service transportation programs was at least \$458,382 during fiscal year 1975-1976. In cases where social service organizations are utilizing volunteer drivers or dispatchers, the cost may be low, but if comparable service were provided by paid staff the cost per passenger trip would be considerably higher than those experienced by municipally sponsored mini bus services for the elderly.

Table XIX shows that the cost per passenger trip ranges from a low of \$.31 for the Heritage Village Mini Bus to a high of \$5.89 for the Morris Foundation's transportation service for their clients. Essentially, the wide variation in the cost per passenger trip reflects different management practices, levels of service and utilization of volunteers. The Morris Foundation utilizes well-paid staff members to drive their vehicles while Heritage Village and the Naugatuck Chapter of the American Red Cross utilize volunteer drivers to provide all their service. Furthermore, the fact that the average length of a trip made by clients traveling in a Morris Foundation vehicle is 21 miles increases the cost per trip above that of organizations which have limited their transportation service to municipal boundaries.

The cost per mile for the six selected social service transportation programs is generally much lower than those recorded for municipal mini bus services for the elderly. Programs such as Morris Foundation, Easter Seal Rehabilitation, the

Naugatuck Chapter of the American Red Cross and the Waterbury YMCA make extensive use of their vehicles for long distance travel. Many of the trips made by those persons traveling in a Morris Foundation vehicle are to state hospitals outside of the Region. Similarly, Easter Seal provides a broad level of daily transportation to clients in the municipalities in the Greater Waterbury, Torrington and Bristol areas. Largely due to the long distance trips, the cost per mile in fiscal year 1975-1976 was \$.29 for Easter Seal Rehabilitation Center, \$.27 for the Morris Foundation and \$.28 for the Naugatuck Chapter of the American Red Cross.

Sources of Funding

The sources of funding for the Region's social service transportation systems are as varied as the transportation programs they offer. Twenty different funding sources were identified for the 25 social service agencies offering transportation to their clients. (See Table XVII) The most common source of funds was the United Way of the Central Naugatuck Valley which allocates monies to 5 different social service organizations. Church contributions support FISH of Woodbury and Waterbury; rental fees or dues support the free mini bus service provided by Heritage Village in Southbury and Carlton Towers and Westview Apartments in Waterbury; Title III and Title VII of the Older Americans Act fund the Elderly Health Screening Service and the Meals-on-Wheels programs, respectively. The Department of Community Affairs partly funds the Neighborhood Youth Services and Headstart; while the Bethlehem Lions Club and the American Cancer Society maintain their services through the contributions of time and money offered by the Bennett Bus Company and private individuals, respectively.

Taxi Service

In Waterbury, taxi service is provided by the Waterbury Yellow Cab Company. Incorporated in 1945, the Waterbury Yellow Cab Company is the largest and oldest taxicab company in the Central Naugatuck Valley Region. The Waterbury Yellow Cab Company has 12 taxi permits and is affiliated with the Curtin Livery service. Cab service is provided 24 hours per day, 7 days per week with 10 to 15 checker cabs

on the road. Waterbury Yellow Cab Company will pick-up clients anywhere in Waterbury or Watertown and take them to any destination within the State of Connecticut. Taxis are metered at 60¢ for the first 1/5 mile and 10¢ for each additional 1/5 mile. However due to recent increases in operating costs Waterbury Yellow Cab is proposing a 29.6% increase in fares. This is expected to raise the average fare from \$1.80 in 1976 to \$2.20 a trip in 1977. In addition, the Majestic Cab Service operates one cab serving Waterbury and Prospect six days a week from 7 a.m. till 1:00 a.m. Its service costs 70¢ for the first mile and 10¢ for each additional 1/5 mile.

Level of Service

Cab service in Waterbury had been steadily declining before management of the company was transferred to Charles Curtin, owner of several taxi companies in New London, in January, 1975. The previous owner had been unable to maintain taxi service at levels necessary to meet the demand. Many residents complained about the long waiting time to get cabs while some accused the company of discriminating against residents of the black and Spanish-speaking communities.

In 1960, the company operated with 20 cabs but by the time Curtin Livery took possession in January, 1975, there were only 4 cabs in service. Despite the steady decline in the number of cabs available to serve Waterbury and Watertown residents, the number of passenger trips made by taxis remained high. (See Table on following page) A discontinuation of the City's weekend and evening bus service, a reduction in the number of bus routes and an influx of black and Spanish-speaking persons with limited automobile ownership, all contributed to a greater need and greater use of taxi service during the last ten years. As can be seen in the table on the following page, annual trips per taxi consistently increased with the decline in bus ridership and the decline in the number of cabs available to serve the public.

Operating Characteristics and Ridership Levels on
Waterbury Yellow Cab Company 1965 - 1975

	<u>Trips</u>	<u>Trips per Cab</u>	<u>Taxicabs¹ in Operation</u>
1965	206,554	12,909	16
1966	179,482	12,820	14
1967	156,074	11,148	14
1968	144,823	11,140	13
1969	130,466	10,872	12
1970	127,682	12,768	10
1971	164,060	16,406	10
1972	182,758	15,229	12
1973	183,788	18,378	10
1974	135,170	33,792*	4
1975	164,838	11,774	14

¹ On December 31st of each year.

*This figure may be high due to the fact that the actual fleet size, on December 31st may not truly reflect the number of cabs in service during the year.

Source: Connecticut Public Utilities Control Authority, November, 1976.

Even in 1975 when Waterbury Yellow Cab increased its fleet size to 14 taxis, residents of Waterbury were still receiving a lower level of service than that provided by other taxi companies in the other major metropolitan areas of the State. As can be seen in the Table on the following page, in 1975, the franchise area served by the Waterbury Yellow Cab had the lowest level of cabs and the lowest number of potential taxis available per 100,000 residents compared to all the major urbanized areas in the State. There were only 11.3 cabs available for every 100,000 residents of Waterbury and Watertown, whereas Stamford had 24.9, Greenwich 28.4 and New Haven 30.7 cabs for each 100,000 residents. Even if the maximum number of certified taxis were in operation Waterbury would still have fewer cabs than are currently available in any other major urbanized area of the State.

Not surprisingly, the low number of cabs available in Waterbury has meant that Waterbury cabs are providing a greater number of trips per cab than any other taxi cab company in the State. It has also meant that patrons are forced to wait for service because the demand for cabs is greater than can be met with the current fleet of checker cabs. Under the previous owner, Waterbury Yellow Cab's virtual

**Level of Taxi Cab Service in Major
Urbanized Areas of Connecticut: 1975**

	1975 Population	No. of Taxi Cabs Operating On Dec. 31, 1975	Taxi Cabs Authorized to Serve Franchise Area	Cabs Per 100,000 Population	Potential Cabs Per 100,000 Population
East Hartford, West Hartford, Hartford, Bloomfield, Wethersfield	324,000	88	152	27.1	46.9
Norwalk	79,900	18	30	22.5	37.5
Greenwich	63,300	18	26	28.4	41.0
Bridgeport	152,000	38	49	25.0	32.2
Norwich	44,500	14	15	31.4	33.7
Stamford	108,300	27	49	24.9	45.2
East Haven, North Haven, West Haven, New Haven, Hamden, Woodbridge	292,500	90	109	30.7	37.2
New London, Groton	67,100	44	49	65.6	73.0
Willimantic	20,400	9	13	44.1	63.7
Torrington	31,700	5	18	15.7	56.8
Waterbury/Watertown	133,200	15	24	11.3	18.0
TOTAL	1,296,500	366	534	28.2*	41.2*

*Average

Source: Public Utilities Control Authority, October, 1976, and Connecticut Department of Health, Weekly Health Bulletin, Vol. 56; No. 40, (October 31, 1975).

monopoly of demand responsive transportation resulted in consistently high profit margins. The company never showed a loss during the period 1960 to 1974. Indeed, even in 1975, when Curtin Livery acquired the company and expanded its fleet size, the company realized its largest net revenue in fifteen years and the second largest net revenue of any cab company in the state during 1975. The increased profit and the increased ridership experienced under the first year of the new

management clearly indicate that even with the emergence of many social service transportation programs and the Mini Transit Service, the demand for taxi service is still greater than can be met with its current fleet size.

The owner of Waterbury Yellow Cab has indicated that he intends to increase the number of cabs in his fleet to as high as 20 or 24 over the next five years. This would increase the ease of obtaining taxi service for the elderly and other immobile groups.

In 1975, each cab operated by Waterbury Yellow Cab provided 11,774 trips. In total, the company made 164,838 trips which at an average load factor of 1.5 passengers per trip translated into 247,000 passenger trips in 1975. Based on a December, 1975 survey of 50 taxi patrons in Waterbury conducted by the CNVRPA as many as 42% of all taxi riders are 60 years or over. On an annual basis, this survey indicated that there may be as many as 104,000 taxi trips made by the elderly.

Though taxis are not the primary means of travel for most elderly, elderly persons account for a disproportionate share of all taxi riders. Elderly taxi riders are regular users of this mode of travel. As many as 77% said that the taxi cab is their usual means of travel and 66% said they travel by taxi at least once every week. In part, the difficulties of walking to a bus stop, the uncertainties of relying on family or friends for transportation and the low level of auto ownership among the elderly has often forced many elderly to use the more expensive but more convenient taxi cabs.

The 1975 survey of taxi riders revealed that 55% of all the elderly taxi riders said they traveled by taxi because it is the most convenient means of travel. However, architectural barriers posed by public buses or the distance of bus stops from home were also cited as reasons for using the taxi by 45% of the elderly surveyed. Finally, 30% of the elderly taxi patrons surveyed said they travel by taxi because they have no alternative way to travel. The fact that 90% of all elderly taxi

riders did not own a car at the time of the survey certainly contributes to their dependence on taxis to maintain their mobility. The need for taxi service has been especially felt by those elderly needing to travel on weekends or evenings when no public bus service is available and specialized transportation systems like Mini Transit are not in operation.

While the elderly are the most frequent users of the taxi cab in Waterbury, they are often the least able to afford it. A survey of elderly taxi riders, conducted in December, 1975, found that as many as two-thirds of all the elderly cab users lived on incomes below \$5,000 a year. These individuals are hesitant to use cabs even when they need to travel because cab fares are relatively high at an average of \$1.80 a trip.²⁹ Indeed, if the tip is included and the return fare is considered, an elderly person may spend an average of \$4.00 every time he or she hires a taxi.

Suburban Taxi Service

Those living in the suburban municipalities have experienced a sharp decline in what little taxi service they ever had. Within the last six years, three taxi companies have gone out of business in the municipalities of Naugatuck, Thomaston and Woodbury. These services have been discontinued due to a decline in patronage partly caused by the advent of elderly mini buses and increased automobile ownership. However, those living in Cheshire, Prospect and Southbury still have taxi service available. The 3 companies operating in these towns, the Cheshire Taxi and Livery Company in Cheshire provides 6 days a week service between 6:00 a.m. and 6:00 p.m. but with no service on Sunday. The Laurel Taxi Company in Southbury operates 7 days a week between 6 a.m. and 10 p.m. and the Majestic Cab Service operates 6 days a week between the hours of 7 a.m. and 1 a.m.

²⁹ CNVRPA, Recent Trends of Selected Transportation Modes and Facilities in the Central Naugatuck Valley Region, January, 1976, p. 16 and the Public Utilities Control Authority, October, 1976.

Although the suburban cabs offer transportation to the elderly on Saturdays when most mini buses do not operate, they provide little or no evening service. This has meant that elderly living in the suburban municipalities who do not own an automobile have had to face limited mobility or dependence on others for travel.

Livery Service

Curtin Livery Service and the Cheshire Taxi and Livery Company provide livery services geared to elderly in rest homes, handicapped clients of social service agencies, elderly members of local churches and clients of the State Department of Social Services.

Curtin Livery operates with 10 livery permits and the Cheshire Taxi and Livery operates with 2 livery permits. Curtin Livery Service is available from 8:00 a.m. to 10:00 p.m. 7 days a week while Cheshire Taxi and Livery provides livery service Monday through Saturday from 6:00 a.m. to 9:00 p.m. According to a spokesman for Curtin Livery, most of the people who currently use their livery service are low-income or unemployed. This is due in part to a large contract in excess of \$100,000, from the State of Connecticut to transport welfare clients in the Waterbury area for medical trips to hospitals and clinics.

Other contracts with agencies include an agreement with various handicapped residents of Waterbury, Watertown, Wolcott, Prospect, Middlebury and Naugatuck for transportation by Curtin Livery to various recreational centers for the handicapped in Waterbury. Price ranges from \$2 to \$4 per round trip depending on the town of residence of the handicapped persons.

Waterbury Hospital also contracts with Curtin Livery for the transport of its psychiatric patients. The Easter Seal Rehabilitation Center of Greater Waterbury, Inc., also uses Curtin Livery to provide transportation for its patients, and as of 1975, the livery service received a contract from the Waterbury School Board for the transportation of approximately 20 blind and deaf students.

Other livery services available in the Region include chartered bus service, limousine service to Connecticut and New York airports and chauffeur driven limousines for funerals and weddings.

Chair Car Services

For some elderly individuals who, because of physical disabilities, are unable to travel by bus or taxi and who do not have relatives or friends to carry them about, chair car service may be the only alternative. There are four chair car services providing transportation in the CNVR. These include B&C Medical Services serving the entire CNVR, Connecticut Medicar whose service area includes Waterbury, Thomaston and Bethlehem, Hunter Meriden Ambulance whose service area includes Cheshire and Med-I-Chair Coach whose service area includes Southbury and to a limited extent Oxford and Woodbury. B&C Medical Service is the principal chair car service in the Region and is available on a 7 days a week, 24 hours a day basis with special emphasis on the needs of the non-ambulatory and wheelchair confined elderly and handicapped. B&C Medical Services is available for any trip purpose, but generally it is used for trips to medical facilities. Unlike other public modes of transportation, chair car service provides trained personnel to assist non-ambulatory and disabled individuals while traveling in their vehicles. Partly as a result of these extra services, transportation by chair car is considerably more expensive than normal public transportation. Presently, the base rate for using a chair car service is \$15 for a one-way trip for in-town travel, and \$1.25 per mile for out-of-town travel. B&C also offers discount rates for group travel but as a rule, few persons using their service travel as a group since group rates are not much cheaper.

Despite the high cost of service, B&C Medical Service estimates that it provides 120 passenger trips per day or 14,400 per year. The bulk of their service is provided within the urbanized portion of the Region where most of the elderly and handicapped reside.

B&C Medical Services has become an important mode of travel for those living in extended care facilities or for young persons with a handicap who need routine transportation to work or recreational activities. The owner of B&C Medical Services stated at the public hearing held on November 23, 1976 that the travel needs of clients of the Division of Vocational Rehabilitation is their biggest problem. An increase in the number of clients needing routine transportation to work sites has made it difficult for them to provide transportation to this group and still maintain services for all other users of their service. Increasing routine travel patterns of users of B&C Medical Service have created problems in providing service over the entire Central Naugatuck Valley Region. In effect, service has been spread over too large an area to accomodate the growing demand for regular chair car service.

Vehicles for the Handicapped

Though B&C Medical Services is offering the only wheelchair accessible transportation service in the Region, there are now at least four separate organizations which have independently initiated efforts to purchase wheelchair accessible vehicles. Waterbury Yellow Cab is purchasing a nine-passenger van with a wheelchair lift, United Cerebral Palsy is in the process of replacing its station wagon with a 1977 van capable of transporting one wheelchair, Mini Transit has proposed an expansion of its service to the handicapped using a van with low entry ways and a wheelchair lift and the Central Naugatuck Valley Regional Planning Agency and Connecticut Department of Transportation have proposed the implementation of a regional transportation service, funded by UMTA, specially geared to the needs of the handicapped. These four new services coupled with the existing services offered by B&C Medical Services primarily focus on the City of Waterbury. It is expected that the emergence of these new services will significantly improve the mobility of the handicapped in the Waterbury urbanized area.

Travel costs will be reduced for those riding on the two UMTA buses, the van

operated as a taxi and MiNi Transit's mini bus adapted to serve wheelchairs. There are no fares on MiNi Transit at the moment but it is expected that it will cost handicapped persons 50¢ a round trip to use the service next fiscal year. Taxi fares for the wheelchair bound are expected to be the same as current rates, and fares on the UMTA buses are expected to be set at comparable levels with those of North East Transportation Company.

The level of duplication between the four new services will largely depend upon the demand stimulated by the lower cost service. If fares are not sufficiently low to attract the low income handicapped persons, there may be insufficient demand for all these services.

Duplication of services could be reduced by offering low cost travel but also by merging the proposed services into a more comprehensive transportation program for the handicapped.

One method of coordinating these services would be by having an existing para-transit operator such as B&C Medical Services, Waterbury Yellow Cab or MiNi Transit operate the two UMTA buses for the handicapped. Further coordination could occur if MiNi Transit were to operate its services under the management of Waterbury Yellow Cab or B&C Medical Services.

Para-Transit Within the Hierarchy of Public Transportation

Despite the large number of vehicles and the large expenditures of para-transit services, the bus remains the principal mode of public transportation in the Region. Approximately 70% of all the passenger trips made on public modes of travel were carried by public bus service in 1975. However, local bus service accounted for only 30% of the total miles of service and for only 27% of the total vehicles operated by the total transit system. Nonetheless, North East still remains the principal provider of public transportation for the elderly and handicapped. As can be seen in the table below 328,880 of the estimated 556,549 trips made by the elderly on public modes of travel were made on North East buses.

Comparison of Riderhip Levels on Local Modes
of Travel in the CNVR: 1975

	Vehicles	Total Miles	Total Ridership	Total Elderly Ridership
North East Transportation	32	675,263	1,315,442	328,880
Waterbury Yellow Cab Co.	14	679,565	274,000	104,000*
Laurel Taxi Company	2	146,000	11,000	4,620
Majestic Cab Service	1	50,000	18,000	7,560*
Mini Transit	5	76,486	48,391	24,444
B&C Medical Service	9	90,000	14,400	7,200
Suburban Municipal Mini Bus Services	9	165,831	57,031	57,031
Social Service Agencies	42	328,730	108,438	18,000
Curtin Livery	2	93,057	22,077	2,000
Cheshire Taxi	1		4,700	1,974*
Cheshire Livery	2		2,000	840*
Total	119	2,304,932	1,875,479	556,549

*Estimate based on CNVRPA Taxi Survey, January, 1976.

Source: CNVRPA Coordination Survey, PUCA and interviews with the owners of Waterbury Yellow Cab Company, B&C Medical Services, Cheshire Taxi and Livery Company, Laurel Taxi Company, and Majestic Cab Service, January, 1977.

**Summary
of Needs and
Opportunities**

Summary of Needs and Opportunities

A greater number of transportation options have become available to the elderly and handicapped during the last decade. All of the Region's municipal mini bus services, social service transportation programs, chair car services and several livery services have emerged since 1966. They are providing improved mobility for the elderly and handicapped but there are still basic problems with the efficiency, level and cost of transportation services available to these individuals. The major problems and opportunities posed by the existing transit system can be summarized as follows:

Condition: The low productivity of municipal mini buses and social service agencies transportation programs has led to expensive and inefficient provision of service.

Opportunity: Efforts are needed to expand ridership on municipal mini buses to the non-elderly and consolidate social services transportation programs to reduce needless duplication of efforts and expenditures.

Condition: The high cost of taxi and chair car service precludes their use in meeting the routine transportation needs of the elderly and handicapped.

Opportunity: The Urban Mass Transportation Administration emphasizes the need for special efforts to provide the elderly and handicapped with low cost transportation. UMTA subsidies should be considered for those para-transit providers who are transporting elderly and handicapped persons essentially dependent on personalized transportation to maintain their mobility. Subsidies could be provided to the user who is given a choice in which mode he or she wishes to travel or the subsidy could be to the para-transit operator.

Condition: *The high demand for taxi service compared with a low level of cabs per 100,000 population has reduced its convenience and availability.*

Opportunity: *Group riding could improve the availability of taxi service for not only the elderly and handicapped but the general taxi riding public. Group riding would also reduce per passenger costs and allow the taxi to offer its services as a substitute for municipal mini bus and social service transportation programs.*

Condition: *The architectural barriers of public buses have forced many elderly and handicapped persons to rely on para-transit services.*

Opportunity: *The introduction of 25 replacement buses for North East Transportation Company will help to reduce the proliferation of specialized transportation services which are currently transporting a large percentage of Waterbury's ambulatory elderly and handicapped residents. Barrier free buses could increase ridership levels for North East since the elderly and the handicapped are probably the two most dependent users of its services. However, the new buses must also provide service to medical, shopping, social and recreational facilities which are accessible to these individuals so the handicapped are able to travel independently after getting off the bus.*

Condition: *Low income elderly and handicapped persons living in Waterbury may be without the services of Mini Transit if permanent funding sources are not developed soon.*

Opportunity: The MiNi Transit Service must consider initiating a fare system and modifying its services to ensure its eligibility for UMTA Section 5 operating subsidies. This could involve incorporation of the service into Waterbury Yellow Cab, North East Transportation Company or B&C Medical Services.

Condition: Social service agencies are not aware of the hidden costs of their transportation programs nor the overall costs of operating all social service transportation programs available in the Region.

Opportunity: The large expenditures made by individual agencies operating separate transportation services could be more productively allocated if social service agencies coordinated their funds and their transportation programs and jointly purchased service from the existing public bus, taxi, livery or chair car operators. If agencies desire to maintain their transportation programs, savings could still be realized through cooperative purchase of equipment, supplies, maintenance and parking.

Condition: The elderly and handicapped are not fully aware of the vast array of transportation services provided by the Region's buses, taxis, liveries, chair cars, mini buses and social service agencies.

Opportunity: There are three separate efforts required to educate and inform the elderly and handicapped of these transportation options. A transportation telephone hotline could be a starting point for an individual's search for the proper information. This could be supplemented by a more comprehensive distribution of the CNVRPA's Consumers' Guide to Transportation in the CNVR to ensure that all major

facilities and institutions serving the elderly and handicapped are provided with sufficient copies that can be made available to their clients. Finally, North East should consider printing pocket size bus schedules in large, easy to read lettering for all of its bus routes.

Condition: *Elderly and handicapped persons in Waterbury have no low cost evening transportation nor sufficient weekend service.*

Opportunity: *Mini Transit is considering offering evening and weekend service starting in fiscal year 1978. Provision of increased evening, especially Thursday evening, and increased weekend transportation should also be considered by North East.*

Condition: *Social service agencies which are providing emergency and medical transportation have been unable to maintain reliable service due to a lack of volunteers and funds.*

Opportunity: *Financial support for essential transportation services should be sought from municipal governments when these services are not currently being provided by municipally sponsored mini bus programs. In addition, incentives must be created to encourage individuals to volunteer their time for driving and administering these services.*

Condition: *Elderly living in Beacon Falls, Bethlehem and Middlebury are without mini bus service. The 1975 Operation Outreach Study indicated that transportation was the most serious problem of elderly living in Beacon Falls and Middlebury.*

Opportunity: *Neither of the three towns merits its own transportation program due to the small size of their elderly population. Nonetheless, the elderly in these three towns could be provided with transportation through the use of the Meals-on-Wheels vehicles and by expanding the services of mini*

buses operating in adjoining municipalities.

Condition: *Most residents of extended care facilities have little opportunity to use public transportation and few activities to engage in outside of their institutions. Improved transportation would facilitate scheduling activities for residents of these facilities.*

Opportunity: Efforts must be made to make public transportation services accessible and barrier free to the institutionalized elderly and handicapped. Municipal mini buses should offer these isolated individuals greater mobility by utilizing vehicles adapted to serve the handicapped. Though most municipal mini bus directors have indicated a reluctance in serving residents of extended care facilities, these institutionalized persons must be given the same opportunity to use the town's free transportation services as elderly residents living within the community.

Condition: *Not all elderly are capable of utilizing the services of municipal mini buses, taxis, and buses due to their physical disabilities and the architectural barriers of the vehicles.*

Opportunity: As many as 53% of all the handicapped residents of the Region are also elderly. These individuals are entitled to use the free transportation of municipal mini buses but are often unable to do so due to lack of provisions for wheelchairs, high steps and insufficient emphasis on the needs of those requiring medical transportation. In order to provide equal transportation opportunities to all elderly (of which as many as 9% are handicapped with respect to transportation) mini buses should be equipped with wheelchair lifts or ramps and have lower entry ways. The UMTA buses for the handicapped

could also provide these individuals with increased mobility and serve those municipalities which may be reluctant to purchase more expensive barrier free vehicles.

Condition: Many elderly and handicapped persons may be able to travel independently when provided with suitable transportation but may be unable to enter the facilities they wish to utilize.

Opportunity: Handicapped persons indicated that ramps, elevators and wider doors were the three most important structural modifications required to promote their mobility when entering the community at large.

Prioritization of Needs

Unlike the elderly, handicapped persons have received little or no local financial support for the development of transportation services to meet their needs. There are no commissions on the disabled representing the handicapped and lobbying for town funds in the same manner as commissions on aging have done for the elderly. Moreover, the lack of federal funds available to activate special transportation programs for the handicapped (like those available to the elderly through the Department on Aging) has also contributed to the delay in meeting the travel needs of these individuals. However, another reason lies with the handicapped themselves; they are generally less organized and less vocal about their own needs than the elderly.

Despite the overemphasis in the past on the transportation needs of the elderly, today the highest priority is the provision of low cost transportation for the handicapped who are non-ambulatory and semi-ambulatory.

The Urban Mass Transportation Administration (UMTA) has called for special efforts in the transportation planning process to ensure that the wheelchair bound are provided with low cost transportation comparable to that offered to the general public. The underlying philosophy of the UMTA regulations is that those who are unable to utilize conventional transportation (buses and taxi) should be provided with comparable alternatives which offer them the opportunity to compete for jobs and participate in their community as effectively as those who face no transportation barriers. The regulations state:

The term "special efforts" refers both to service for elderly and handicapped persons in general and specifically to service for wheelchair users and semiambulatory persons. With regard to transportation for wheelchair users and others who cannot negotiate steps, "special efforts" in planning means genuine, good-faith progress in planning service for wheelchair users and semiambulatory handicapped persons that is reasonable by comparison with the service provided to the general public and that meets a significant fraction of the actual transportation needs of such persons within a reasonable time period. Particular attention should be given to those handicapped persons who are employed or for whom the lack of adequate transportation constitutes the major barrier to employment or job training.

Though there are at most 2,650 individuals in the Region who are semi-ambulatory or non-ambulatory their travel needs are the greatest and their travel options the most limited. These individuals are generally unable to use public buses because of the architectural barriers of the vehicles and the lack of assistance offered while entering and exiting from the vehicles. Nonetheless they are able to use chair car service and may also be adequately served by taxi and livery if the driver provides assistance. However the high rates charged by chair cars, in particular, effectively precludes their use for routine transportation purposes. Low cost public transportation for the non-ambulatory must be developed to offer these individuals the opportunity to compete for jobs in the Waterbury Labor Market.

In the Greater Waterbury Area there are two large employers of the handicapped: Community Workshop in Waterbury and the Easter Seal Job Shop in Oakville. These two facilities have 130 handicapped persons who require daily transportation to reach work. Many of these individuals are able to utilize public bus service and some are able to drive to work in specially equipped vans adapted for the wheelchair bound. However there are large numbers of individuals who cannot use North East and who have been unable to participate in the Job Shop because they were unable to afford the cost of specialized transportation services such as chair cars or taxis. Lack of low cost transportation for the Journey to Work is one of the greatest needs of the handicapped.

Table XX indicates the volume of traffic generated by the major facilities serving and/or housing the Region's handicapped population. The Figure on page 74 locates these in the Region. As can be seen in the Table over 260,000 trips are generated by these 39 facilities of which approximately 65,000 trips or 25% of the total were for the Journey to Work.

Although UMIA is concerned with offering equal employment opportunities for the handicapped, an equally important justification for offering low cost transportation is to increase their access to hospitals, clinics or doctors' offices. As can be

seen in the Table below nearly one out of every four handicapped persons in the CNVR were unable to obtain convenient transportation to doctors' offices, hospitals or clinics. Moreover the percentage of handicapped persons unable to obtain convenient transportation to these facilities was significantly higher than elderly residents of the Region although constituting about the same percentage as elderly living in Waterbury.

Availability of Convenient Transportation
to Key Facilities for the Elderly and Handicapped

	Percent Unable to Obtain Convenient Transportation		
	Elderly in Waterbury	Elderly in the Region	Handicapped in the Region
Shopping Centers	21%	17%	23%
Doctors' Offices	20%	17%	24%
Hospitals or Clinics	22%	18%	22%
Employment Centers	-	-	21%

Source: Northwest Connecticut Agency on Aging, Operation Outreach 1975 and Waterbury Regional Center, Housing and Accessibility Survey 1976.

While the two surveys indicate there is some need for improved, personalized, convenient transportation services, these statistics do not provide a clear picture of the level of transportation services that should be provided since convenience is only one factor to be considered in an evaluation of needs. No inferences can be made as to whether those unable to travel conveniently are capable of meeting their needs through other less convenient modes of travel or by relying on friends or relatives. If other forms of transportation are available then the question of need is a relative one, depending upon the users evaluation and preference for personalized and convenient transportation over less convenient and less personalized transportation.

For less essential trip purposes such as recreation and socializing there is an even greater difficulty with quantifying demand for public transportation. These

types of travel needs are artificially created and may be eliminated or replaced by other activities within the home if the transportation system inhibits their expression. Most elderly and handicapped fulfill most of their social and recreational needs within their homes or institutions with the result that they require very little transportation. Television offers entertainment and family or relatives may often provide for their shopping needs. However established patterns of living lives of limited mobility has contributed to their acceptance of poor public transportation and their tendency to replace travel to community activities with leisure activities that can more easily be satisfied without active participation and travel outside of their own homes or institutions. For this reason the indications of personal travel needs voiced by the elderly and handicapped are often very misleading because their needs may simply be reflecting their acceptance of limited public transportation services and their lack of opportunities for engaging in meaningful activities within their community.

Improvements in public transportation and active efforts to integrate the elderly and handicapped into their community can be expected to have dramatic effect upon the need for more transportation. Interviews with the directors of organizations providing activities for the handicapped revealed that enrollment in their programs was all too often limited by the availability of transportation. The director of the YMCA recreation programs for the handicapped stated that enrollment would be twice as high if low cost transportation was available. Similarly, Mike Goodiel, President of the Waterbury Handicapped Organization (WHO) felt that participation in WHO was limited by the cost of public transportation services such as chair car, taxi and livery. Those who are able to attend WHO are generally transported by friends or relatives. Furthermore, Mr. Goodiel emphasized that one of the reasons for the lack of activities for the handicapped was a lack of transportation.

Recent efforts to deinstitutionalize the elderly and handicapped and reintegrate them into their community have in large part been responsible for most of the recent public concern with the transportation needs of these individuals. The need for expanded public transportation for these transit dependent individuals has been more than an expression of the personal needs of the elderly and handicapped: It reflects a general social perception that mobility and independence are two important needs which should be encouraged and fostered among these isolated and institutionalized individuals. The Table below suggests that social acceptance of the isolation of the elderly and handicapped will hopefully change as our social values begin to emphasize social integration rather than institutionalization as the basis of future social planning.

	ACCEPTANCE	MODIFICATION
INDIVIDUAL NEEDS	DEPENDENCE REST	INDEPENDENCE ACTIVITY
SOCIAL VALUES	INSTITUTIONALIZATION ISOLATION	SOCIAL INTEGRATION PARTICIPATION

The larger social concern for improved public transportation for the elderly and handicapped has tended to stress the social and psychological "good" that comes from improving their mobility. Social withdrawal, depression, malnutrition, and other psychological ills have been effectively remedied in many instances by increasing a person's mobility and independence. This aspect of the transportation need of the elderly and handicapped has not been addressed by most transportation studies nor can it be fully quantified in this study. Nevertheless it is an important need and it must be considered as one reason for improving and expanding service for the elderly and the handicapped.

The point of this theoretical elaboration has merely been to emphasize that the need for transportation will become greater as the isolated and institution bound desire to become independent and their community supports their new lifestyle.

The recent and growing interest in deinstitutionalizing the elderly and handicapped will undoubtedly continue to increase the need for personalized para-transit services for these individuals and stimulate their involvement in the affairs of the community.

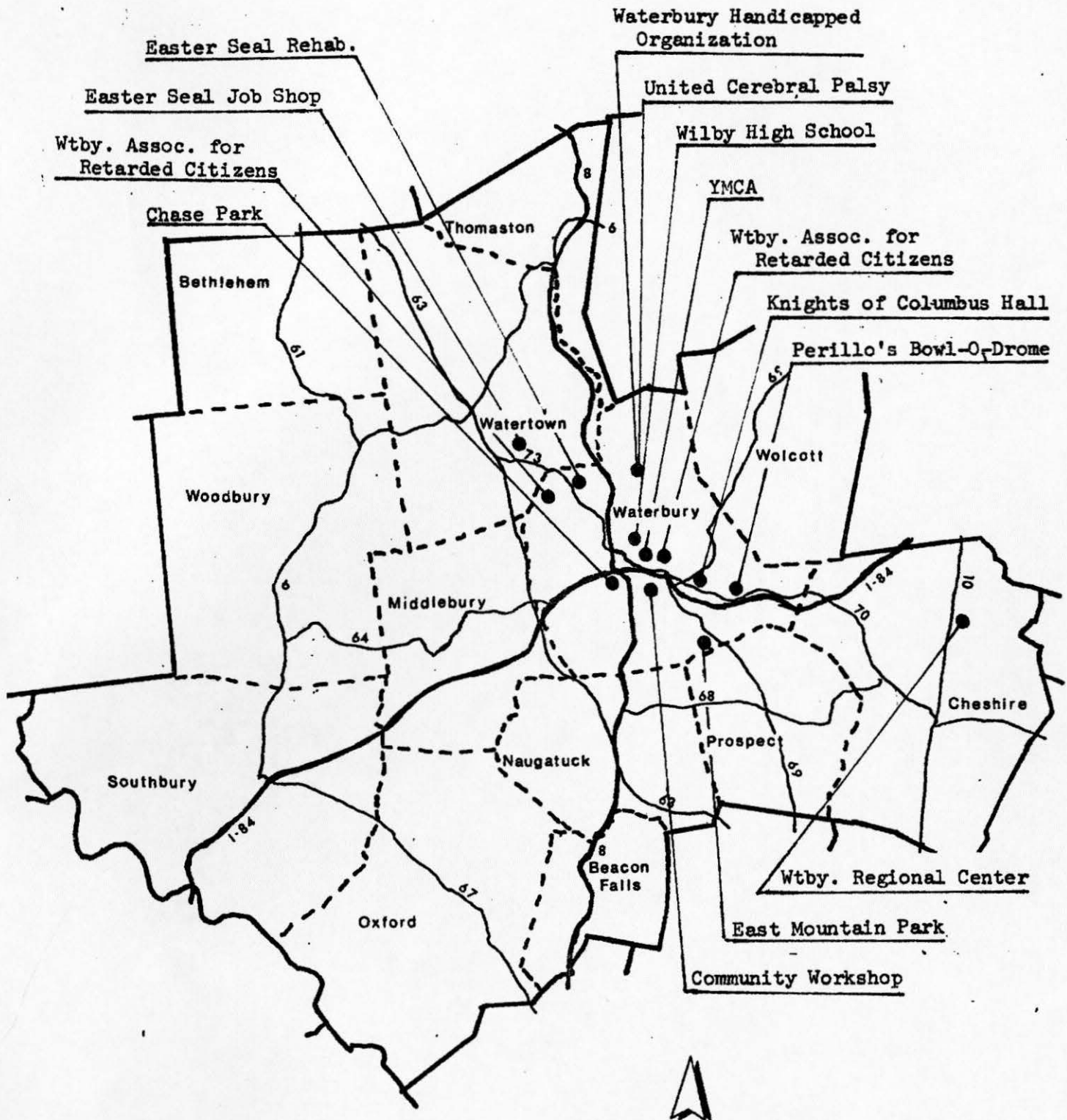
has been more than an expression of the personal needs of the elderly and handicapped. It reflects a general social perception that mobility and independence are two important needs which should be encouraged and fostered among these individuals. The Table below suggests that social acceptance and institutionalized individuals. The Table below suggests that social acceptance of the isolation of the elderly and handicapped will hopefully change as our social values begin to emphasize social integration rather than institutionalization as the basis of future social planning.

INDIVIDUAL NEEDS	ACCEPTANCE	
	DEPENDENCE	INDEPENDENCE
SOCIAL VALUES	ISOLATION	INSTITUTIONALIZATION
	REST	ACTIVITY

The latter social concern for improved public transportation for the elderly and handicapped has tended to stress the social and psychological "good" that comes from improving their mobility. Social withdrawal, depression, malnutrition, and other psychological ills have been effectively remedied in many instances by increasing a person's mobility and independence. This aspect of the transportation need of the elderly and handicapped has not been addressed by most transportation studies nor can it be fully quantified in this study. Nevertheless it is an important need and it must be considered as one reason for improving and expanding services for the elderly and the handicapped.

The point of this rhetorical elaboration has merely been to emphasize that the need for transportation will become greater as the isolated and institutionalized desire to become independent and their community supports their new lifestyle.

MAJOR DESTINATIONS OF HANDICAPPED PERSONS
IN THE GREATER WATERBURY AREA: 1976



CENTRAL NAUGATUCK
VALLEY REGION

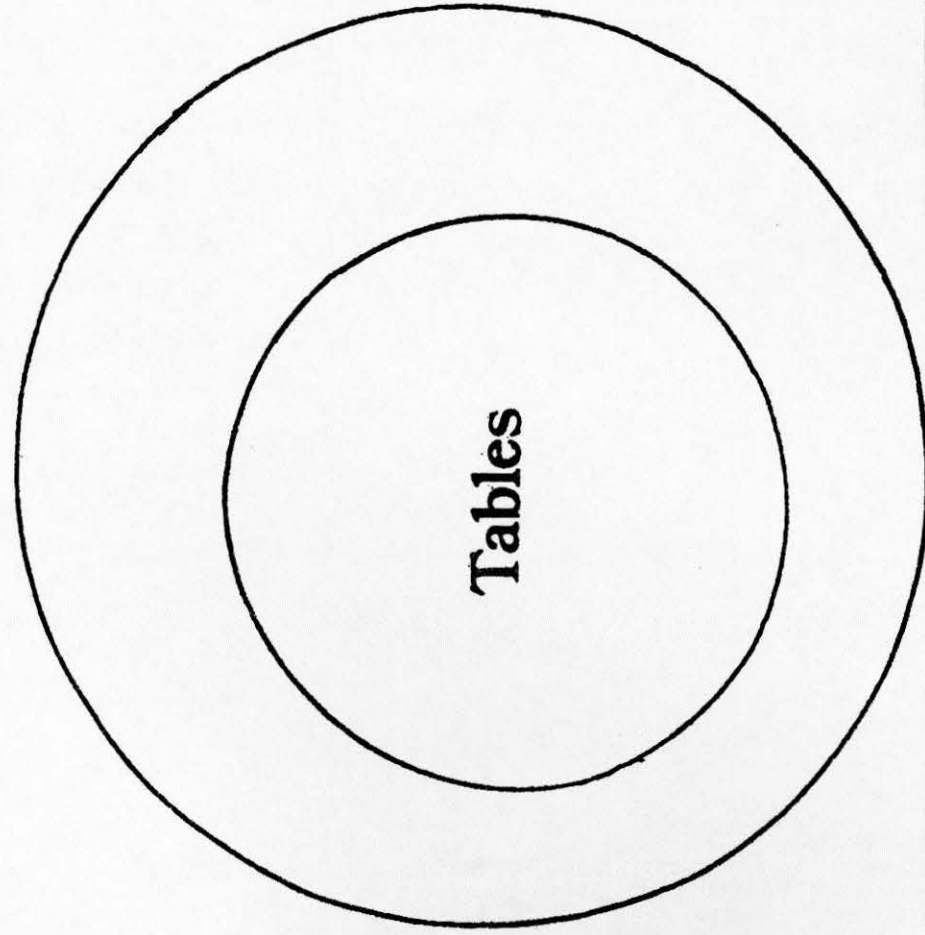


TABLE I

**Automobile Ownership Among the Elderly
and the General Population: 1970-1975**

Municipality	Percentage of Elderly Who Do Not Own an Auto* 1975	Percentage of Households Without An Auto** 1970
Beacon Falls	40	7.8
Bethlehem	24	4.8
Cheshire	30	3.7
Middlebury	27	5.7
Naugatuck	41	11.1
Oxford	24	2.4
Prospect	23	2.4
Southbury	27	3.0
Thomaston	35	10.4
Waterbury	55	22.8
Watertown	57	6.9
Wolcott	51	4.3
Woodbury	51	5.0
CNVR	47	15.0

*SOURCE: Area I Agency on Aging, Operation Outreach, 1975

**SOURCE: U.S. Bureau of the Census, Census of Population and Housing: 1970 Census Tracts, Final Report, PHC(1)-227, Waterbury, Connecticut SMSA, U.S. Government Printing Office, Washington, DC, 1972.

TABLE II

Operation Outreach Survey of the Elderly in the Central Naugatuck Valley Region: 1975 (In Percent)

	Is Your Neighborhood Served by a Bus or Some Other Means of Transportation which is Convenient for You to Use?		What Method of Transportation Do You Mostly Use?				
	YES	NO	Own Car	Bus	Children and Other Relatives	Friends	Other
Beacon Falls	36	64	52	-	36	12	-
Bethlehem	100	-	76	-	16	8	-
Cheshire	18	82	77	-	15	5	3
Middlebury	7	93	84	-	11	5	-
Naugatuck	17	83	56	6	28	7	3
Oxford	4	96	80	4	12	4	-
Prospect	-	100	83	-	10	3	4
Southbury	-	100	80	2	9	6	3
Thomaston	-	100	73	-	23	4	-
Waterbury	69	31	46	15	27	6	6
Watertown	27	73	50	4	32	5	9
Wolcott	16	84	51	3	35	5	6
Woodbury	3	97	49	8	22	3	18
CNVR	43	57	55	9	25	6	5
Waterbury	69	31	46	15	27	6	6
Remainder of Region	17	83	63	3.1	25	6	5

SOURCE: Area I Agency on Aging, Operation Outreach, 1975.

TABLE III

Mode of Travel Mostly Used by Waterbury Elderly and Subgroups of
Elderly with Special Transportation Problems: 1975

	Your Own Car	Bus	Children & Other Relatives	Friends	Walk	Taxi	Don't Travel	Special Transportation (e.g., Mini Bus, NOW, Fish, Welfare)	Pay Someone Must Be Taken	Deliveries Made at Home	No Response
Total Elderly											
Total - Based on 805 Surveyed Respondents	370	120	217	48	31	10	7	5	1	1	3
Percent	46.	15.	27.	6.	3.	1.24	1.	.87	.12	.12	.37
Elderly Whose Neighborhood is not Served Conveniently by Bus											
Total 257 (31% of Total)	113	21	98	8	11	2	2	1	1		
Percent	44.	8.2	38.1	3.1	4.3	.8	.8	.4	.4		
Elderly Living Alone											
Total 239 (29% of Total)	63	55	70	27	16	2	2	1	1	1	.4
Percent	26.4	23.0	29.3	11.3	6.7	.8	.8	.4	.4	.4	.4
Elderly Living Alone Without an Auto											
Total 476 (21% of Total)	0	55	66	27	16	2	2	1	1		
Percent	0	31.3	37.5	15.3	13.6	1.1	1.1	.6	.6		

SOURCE: Operation Outreach, Survey of the Elderly in Waterbury, August, 1975.

TABLE IV
Residence of Handicapped Persons in the CNVR: 1970-1975

	<u>Handicapped Clients Identified by Water- bury Regional Center</u>		<u>Handicapped 16-64 Years of age who are not students or residents of institutions</u>	
	1975		1970	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Beacon Falls	4	0.4	118	1.1
Bethlehem	3	0.3	186	1.8
Cheshire	25	2.6	703	6.7
Middlebury	21	2.2	249	2.4
Naugatuck	73	7.6	1,485	14.3
Oxford	0	0	260	2.5
Prospect	25	2.6	354	3.4
Southbury	34	3.6	277	2.6
Thomaston	14	1.4	207	1.9
Waterbury	592	61.9	4,974	47.9
Watertown	97	16.4	786	7.6
Wolcott	55	5.7	549	5.3
Woodbury	14	1.4	239	2.3
CNVR	957	100	10,387	100
Waterbury	592	61.9	4,974	47.9
Remainder of Region	365	38.1	5,413	52.1

SOURCE: U.S. Census of Population and Housing, Second and Fourth Count Data Files.
 Survey of the location of handicapped persons conducted by the Waterbury
 Regional Center, March, 1975.

TABLE V

The Principal Disabling Conditions and Their Effect on Mobility

	Disabling Conditions	Effect on Mobility
Degenerative Conditions Associated with Aging	1. Heart and Respiratory Conditions	People with these conditions should avoid sudden stress or prolonged exertion. They are not able to climb flights of stairs, gradients, or steep ramps, or walk long distances. They are not unsteady.
	2. Arthritis	People with arthritis have very stiff joints, and move slowly, painfully and unsteadily. They have difficulty in climbing high steps and curbs, and in negotiating steep gradients.
	3. Hemiplegia	Hemiplegia involves varying degrees of paralysis usually of one side of the body. Most hemiplegics walk with difficulty, and unsteadily. Many use sticks and callipers. Those in wheelchairs are not, as a rule, able to propel themselves because of the one-sided paralysis, although the use of an electric wheelchair would solve this problem.
	4. Amputation	Amputation of the leg may result in some unsteadiness especially on gradients.
Hereditary and Congenital Conditions	5. Epilepsy	Epileptics have normal mobility, but are often afraid of having convulsions and falling in lifts or on winding staircases.
	6. Bleeding Disorders such as Hemophilia	People with these conditions should avoid undue energy expenditure and should not be bumped or jolted. Some need to use a wheelchair.
	7. Cerebral Palsy	The different types of cerebral palsy may result in weakness, poor balance, or wild uncoordinated movement.
	8. Spina Bifida	Spina Bifida may result in complete or partial paralysis of the lower limbs resulting in difficulty and unsteadiness in walking, and sometimes inability to walk at all. Incontinence is also a major problem associated with this condition.

TABLE V (Continued)

	Disabling Conditions	Effects on Mobility
Hereditary and Congenital Conditions (Continued)	9. Muscular Dystrophies	Dystrophy is muscle wasting sometimes involving paralysis. A wheelchair eventually becomes essential.
	10. Congenital Limblessness	People moving on artificial limbs are usually rather unsteady, especially on slopes. Artificial arms and hands are never entirely effective and people using them may have difficulty with doors and grip rails.
Disease and Damage to the Nervous System	11. Parkinsonism and Other Disorders Involving Voluntary Movements	People with Parkinsonism have a jerky and uncontrolled gait, and are unsteady; handrails are very helpful to them.
	12. Disseminating Sclerosis (Including Multiple Sclerosis)	Sclerosis causes paralysis of muscles and disorders of balance and vision. A wheelchair may eventually become necessary.
	13. Poliomyelitis	Polio can cause wasting and paralysis of the limbs. This may result in unsteadiness especially on gradients and difficulty in climbing slopes. Many people with polio are confined to wheelchairs.
	14. Paraplegia	Paraplegia is a paralysis of the lower limbs. Some paraplegics walk with crutches, but a large proportion are confined to wheelchairs.

SOURCE: Central Council for the Disabled as cited in The International Rehabilitation News. First Quarter, 1975, Volume XXVI, No. 1, P. 23.

TABLE VI
Mode of Transportation Utilized by the Handicapped in the Greater Waterbury Area: 1976

	Own Car	Bus	Family or Relatives	Taxi or Livery	Specialized Transportation Services	School Bus	Walk	Homebound	Total	Per- cent
Mentally Retarded ¹	19	7	8	2	2	5	1		44	41.1
Cerebral Palsy ²	10	1	10		5				26	24.2
Lower Limb Malfunctions ³	5	1	5	1	2			2	16	14.9
Deaf or Blind	5								5	4.6
Muscular Incoordination ⁴	6		8		1		1		16	14.9
TOTAL	45 42.0	9 8.4	31 28.9	3 2.8	10 9.3	5 4.6	2 1.8	2 1.8	107	100

¹ Mentally Retarded included, mildly retarded, mongoloid, severely retarded, slow learners, baby mind, brain damage, Down syndrome, meningitis and mega encephalus.

² Cerebral Palsy includes nervous disorders, off balance.

³ Lower Limb Malfunctions includes weak left foot, amputated legs, broken femur bone or hip bone, dislocated hip, incomplete movement of leg, scoliosis, can't walk, confined to wheelchair, partial and total paralysis, polio, quadruplegic, paraplegic, and shock.

⁴ Muscular Incoordination includes unable to care for self, old age, health impairments, convulsions, stroke (apoplexy), muscular handicaps and Friedreich's Ataxia.

SOURCE: The Waterbury Regional Center Housing and Accessibility Survey, September, 1976.

TABLE VII
COMPARISON OF OPERATING EXPENSES AND FARE BOS REVENUES: OCTOBER, 1975¹

Route Number	Leg Names	Expenses/Revenue Ratio		
		% of ² Full Cost	WEEKDAY Rank	% of ² Full Cost
1	Willow	(115%)	1	(182%)
	Reidville	(139%)		
2	Baldwin St.	(72%)	4	(140%)
3	Lakewood	(90%)	2	(148%)
	Town Plot	(107%)		
4	Watertown	(88%)	8	(109%)
6	Highland	(72%)	3	(142%)
	Walnut	(68%)		
7	Bunker Hill	-	7	(110%)
	Fairlawn	-		
8	Hamilton Ave.	-	13	(95%)
	Wooster	-		
9	Mansfield	-	10	(101%)
	Willow	-		(101%)
10	Fairmount	-	12	(96%)
11	Wolcott	(108%)	11	(98%)
14	Berkeley	(100%)	5	(138%)
15	Hitchcock	(55%)	9	(102%)
16	Hill	-	6	(116%)
	Sylvan	-	-	-
19	Scott Road	-	-	-

Profitable more than 100% of full cost
Not Profitable less than 100% of full cost

¹Survey data collected for Tri-State Regional Planning Agency by CNVRPA, 1975.
This data appears to have been obtained during an abnormally high week.
Ridership is extremely high.

²Percent of full costs refers to the total generated revenue as a ratio of all costs whether fixed or variable.

Source: CE Maguire, 1976, composite evaluation and ranking from source data performed by consultants.

TABLE VIII
Comparative Ranking of Transit Needs and Service Potentials in the CNVR

Municipality	Handi- capped Persons (16-64 yrs. of age)	Elderly Persons (60 yrs. old and over)	Low Income Families (under \$5,000)	Households Without an Automobile	Total Transit Needs*	Ranking of Transit Needs	Density of Need Group (person/ sq. mile)	Ranking of Service Potentials	Average Ranking of Transit Needs and Service Potentials
Beacon Falls	118	461	69	85	733	12	74.7	8	11
Bethlehem	186	353	33	30	602	13	30.5	12	13
Cheshire	703	1,970	322	203	3,198	4	96.9	5	4
Middlebury	249	910	95	97	1,351	9	75.0	7	8
Naugatuck	1,485	3,266	564	837	6,152	2	379.8	2	2
Oxford	260	470	105	33	868	11	26.3	13	12
Prospect	354	588	77	44	1,063	10	74.3	9	9
Southbury	277	1,584	153	68	2,082	5	50.9	10	7
Thomaston	207	866	182	203	1,458	7	121.5	4	5
Waterbury	4,974	18,865	4,212	7,989	36,040	1	1251.3	1	1
Watertown	786	2,266	420	379	3,851	3	129.2	3	3
Wolcott	549	1,032	213	146	1,940	6	94.2	6	6
Woodbury	239	919	116	104	1,378	8	37.4	11	9

*Though some duplication exists between the categories of handicapped persons, elderly persons, low income families and households without an automobile, this overlap tends to reinforce the transportation needs of these individuals. It indicates that a combination of low income, no automobile ownership, physical handicaps or old age increases the immobility of these individuals thereby increasing the urgency of their transit needs.

SOURCE: U.S. Bureau of the Census, Census of Population and Housing: 1970 Census Tracts Final Report PHC(1)-227, Waterbury, Connecticut, SMSA.

TABLE IX

**Ethnic and Racial Composition of the Elderly Population in
Waterbury and of Elderly MiNi Transit* Users: 1975**

	<u>Waterbury Elderly 1975</u>	<u>MINi Transit Users</u>
Black	831	89
Spanish Speaking	148	43
White	18,953	830
	19,932	962
	<u>Percent Distribution</u>	<u>Percent Distribution</u>
Black	4.2%	9.3%
Spanish Speaking	0.8%	4.4%
White	95.0%	86.3%
	100%	100%

**Percent of Elderly in Waterbury Carried By
MINi Transit by Race and Ethnic Group: 1975**

Black	10.7%
Spanish Speaking	30.5%
White	4.4%
Total	4.8%

*The Waterbury Model Neighborhood Transit Service (MiNi Transit) primarily serves Model Neighborhood residents; but, since 1974, when the CNVRPA took over sponsorship, it has made a special effort to meet the transportation needs of the city's elderly.

SOURCE: U. S. Bureau of the Census, Census of Population and Housing: 1970, Census Tracts, Final Report, PHC(1)-227, Waterbury, Connecticut and MiNi Transit User File, October, 1975.

TABLE X

**Hours of Scheduled Transportation Service
of Municipally Sponsored Mini Buses
and Social Service Agencies:
October, 1976**

Municipally Sponsored Mini Buses

<u>Organization</u>	<u>Schedule of Service</u>	<u>Hours</u>
Cheshire Seniors Mini Bus	Monday - Saturday Sunday	10 a.m. - 5 p.m. 9 a.m. - 3 p.m.
Comprehensive Transportation Service	Monday - Saturday	9 a.m. - 5 p.m.
Four Hills Mini Bus	Monday - Friday	9:30 a.m.-- 4:30 p.m.
Model Cities Mini Transit	Monday - Friday	8 a.m. - 4:30 p.m.
Naugatuck Dial-A-Ride	Monday - Friday	9 a.m. - 4 p.m.
Oxford Community Car Pool	Monday - Friday Sometimes Saturday	9 a.m. - 5 p.m.
Prospect Mini Bus	Monday - Friday	9 a.m. - 5 p.m.
Southbury Seniors Mini Bus	Monday, Tuesday, Thursday and Friday Wednesday on demand	9:30 a.m. - 4:30 p.m.
Watertown Dial-A-Ride	Monday - Friday	9 a.m. - 5 p.m.
Woodbury Seniors Mini Bus	Tuesday - Friday Monday only on special occasions	9 a.m. - 5 p.m.

Social Service Agencies

<u>Organization</u>		
American Cancer Society	Monday - Friday	8 a.m. - 5 p.m.
American Red Cross, Naugatuck Chapter	Monday - Friday	7:45 a.m. - 4:00 p.m.
Bethlehem Lions Club	Two Tuesday per month	9:30 a.m. - 1:30 p.m.
Carlton Towers & Westview House	Monday - Friday Saturday & Sunday	8 a.m. - 5 p.m. 9 p.m. - 3 p.m.
FISH of Waterbury	7 days a week	24 hours per day
FISH of Woodbury	7 days a week	On demand

TABLE X (continued)

<u>Organization</u>	<u>Schedule of Service</u>	<u>Hours</u>
Easter Seal Rehabilitation Center	Monday - Friday	8 a.m. - 3 p.m.
Elderly Health Screening Service	Monday - Friday	8 a.m. - 4:30 p.m.
Elderly Nutrition Program COGCNV	Monday - Friday	(meals) 9 a.m. - 2 p.m. (transportation) 2 p.m. - 5 p.m.
Headstart Program	Monday - Friday	7:45 - 3:15 p.m.
Heritage Village	Monday - Thursday Friday	10 a.m. - 12 p.m. 10 a.m. - 2 p.m.
Morris Foundation	Monday - Friday 24 hours day emergency	9 a.m. - 5 p.m. any time depending on scheduling
Neighborhood Youth Services NOW, Inc.	7 days a week	
New Opportunities for Waterbury	Monday - Friday Sometimes Sat. & Sunday	8 a.m. - 5 p.m. on demand in the evenings and weekend
Pearl Street Neighborhood House	7 days a week	9 a.m. - 10 p.m.
Puerto Rican Youth Organ. (PRYO)	7 days a week	generally 9 a.m. - 5 p.m.
RSVP	Monday - Friday	9 a.m. - 5 p.m.
Dept. of Social Services (provided through Curtin Livery, B & C Medical Services & Campion Ambulance)	Monday - Friday Saturday and Sunday	9 a.m. - 5 p.m. by prearrangement
United Cerebral Palsy Assoc. of Greater Waterbury	Monday - Friday	8 a.m. - 9:30 a.m. and 1 p.m. - 2 p.m.
Waterbury Assoc. for Retarded Citizens	Monday - Friday Training Ctr. Monday - Friday Training Ctr. 6 nights/month - Recreation Monday - Friday - Pre-school	7:30 a.m. - 8:30 a.m. 2:45 p.m. - 3:45 p.m. 6:30 p.m. - 10:00 p.m. 7:45 a.m. - 8:45 a.m.
Waterbury YMCA	7 days a week	on demand
Waterbury CETA	Monday - Friday	8:50 a.m. - 4:50 p.m.
Western Conn. Jewish Community Center	Sunday - Thursday Saturday night	9 a.m. - 5 p.m. on demand

SOURCE: CNVRPA staff work, December, 1976

TABLE XI

Vehicles Operated by Municipal Mini-Bus Services and
Social Service Agencies: October, 1976

<u>Interested in Cooperative Purchase</u>	<u>Make of Vehicle</u>	<u>Type</u>	<u>No.</u>	<u>Year</u>	<u>No. Mile</u>	<u>Organization</u>
No	Dodge	Bus	1	1966	-	Wtby. Assoc. for Retarded Citizens
Yes	Chevrolet	Station Wagon	1	1967	59,492	United Cerebral Palsy (UCP)
No	Ford	Sedan	1	1967	-	Div. Vocational Rehabilitation
No	Dodge	Sedan	1	1970	-	Wtby. Regional Center
Yes	Ford	Bus-36 Passenger	1	1971	67,000	Pearl St.
No	Dodge	Van	1	1971	-	Wtby. Regional Center
No	Ambassador	Station Wagon	1	1971	-	Wtby. Regional Center
Yes	Chevrolet	Van	1	1971	57,353	United Cerebral Palsy (UCP)
Yes	Ford	Van	1	1971	31,539	Heritage Vill.
Yes	Ford	School Bus (20 passenger)	1	1971	67,738 (to be replaced)	Headstart
Yes	Dodge	Maxi Wagon	1	1971	66,920	Naugatuck Dail- A-Ride
No	Dodge	20 Passenger Bus	1	1971	19,717	W.Ct. Jewish Community Ctr.
Yes	Ford	Van	1	1972	40,887	RSVP
Yes	Ford	Van	1	1972	65,853	Mini Transit
Yes	Ford	Van	1	1972	72,086	Mini Transit
Yes	Ford	Van	1	1972	38,517	Mini Transit
Yes	Chevrolet	Van	1	1973	49,404	Watertown Dial- A-Ride
Yes	Chevrolet	Station Wagon	1	1973	54,342	Easter Seal Rehabilitation
Yes	Chevrolet	Van	1	1973	25,000	PRYO

TABLE XI (continued)

Interested in Cooperative Purchase	Make of Vehicle	Type	No.	Year	No. Miles	Organization
Yes	Chevrolet	Station Wagon	1	1973	51,775	Easter Seal Rehabilita- tion
No	Ford	12 Passenger	1	1973	22,000	Carlton Tower & Westview
Yes	Ford	Station Wagon	1	1973	46,693	Mini Transit
Yes	Ford	Station Wagon	1	1973	46,491	Mini Transit
Yes	Dodge	Van	1	1973	56,000	Pearl St.
Yes	Chevrolet	Van	1	1974	34,963	Woodbury Seniors Mini bus
Yes	Pontiac	Station Wagon	1	1973	14,866	Oxford Community Car Pool
Yes	Ford	Van	1	1974	27,851	Southbury Seniors Mini Bus
Yes	V.W.	Bus	1	1974	13,150	Morris Foundation
Yes	Chevrolet	Van	1	1974	53,000	Cheshire Seniors Mini bus
Yes	Chevrolet	Wagon	1	1974	34,900	Morris Foundation
Yes	Ford	Van	1	1974	38,304	NOW, Inc.
Yes	Ford	Van	1	1974	45,547	NOW, Inc.
No	Plymouth	Station Wagon	1	1974	37,962	Wtby. CETA
Yes	Chevrolet	Station Wagon	1	1974	66,933	Easter Seal Rehabilitation
Yes	Ford	Bus-60 Passenger	1	1974	35,000	Pearl St.
No	Ambassador	Station Wagon	2	1974	-	Wtby. Regional Ctr.
No	Dodge	Sedan	5	1974	-	Wtby. Regional Ctr.

TABLE XI (continued)

Interested in Cooperative Purchase	Make of Vehicle	Type	No.	Year	No. Miles	Organization
Yes	Dodge	Van	1	1975	38,114	Prospect Mini Bus
Yes	Plymouth	Wagon	1	1975	25,813	Morris Found.
Yes	Dodge	Van	1	1975	52,475	NOW, Inc.
Yes	Dodge	Maxi Wagon Van	1	1975	24,000	Wtby. YMCA
Yes	Chevrolet	Spts. Van	1	1975	38,639	Easter Seal Rehabilitation
Yes	Chevrolet	Van-12 Passenger	1	1975	32,500	Comprehensive Transportation Service
Yes	Ford	Club Wagon	1	1975	20,000	Elderly Health Screening
Yes	Dodge	Van	1	1975	15,439	Headstart
No	Dodge	Sedan	1	1975	-	Wtby. Regional Center
Yes	Plymouth	Van	1	1975	24,100	Four Hills Mini Bus
Yes	Dodge	Maxi Van	3	1976	-	Meals-on- Wheels
No	Ford	Van	1	1976	12,183	W. Ct. Jewish Community Ctr.
No	Chevrolet	Station Wagon	1	1976	12,000	Naugatuck Red Cross

TABLE XII

Labor Structure and Wage Rates of Specialized
Transportation Service in the CNVR: 1976

<u>Social Service Agencies</u>			
	<u>Staff</u>	<u>Working Hrs. of Staff</u>	<u>Wage Rates</u>
American Cancer Society	25 Volunteers	As Needed	None
Carlton Towers	4 Doormen-Drivers	8 a.m. - 5 p.m.	Hourly
Easter Seal Rehabilitation	2 Drivers (includes one backup)	7:30 a.m. - 4:00 p.m.	\$7,000 to 9,300/year
Elderly Health Screening	1 Driver/Clerk	8:30 a.m. - 5:00 p.m.	\$3.23/hour
FISH of Waterbury	69 Volunteers	24 hours/day	None
FISH of Woodbury	43 Volunteers	9:00 a.m. - 5:00 p.m. (or as needed)	None
Headstart	1 Driver	8:00 a.m. - 2:00 p.m.	\$4,160/year
	1 Driver	8:00 a.m. - 3:00 p.m.	3,996/year
	4 Bus Aides	9:00 a.m. - 3:00 p.m.	4,336/year
	1 Project Director	8:00 a.m. - 5:00 p.m.	10,710/year
Heritage Village Mini Bus	8 Volunteers	Each drives 2 hours once/week (10 a.m. - 12 noon)	None
Meals-on-Wheels	2 Drivers	20/week	\$2.63/hour
	1 Driver	20/week	3.25/hour
Morris Foundation	9 Drivers (staff)	As Needed	\$3.80/hour (average)
Naugatuck Chapter of American Red Cross	35 Volunteers	As Needed	None
NOW, Inc.	Staff Coordinators (Drivers)	As Needed	\$6,500 to 7,500/year
Pearl Street Neighborhood House	1 Director (Driver)	9 a.m. - 5 p.m.	\$3.00/hour
	1 Program Coord. (Driver)		
	1 Reading Instructor		
Puerto Rican Youth	3 Staff (Drivers)	As Needed	\$4.50/hour (average)
	6 Board Members		
RSVP	1 Driver	20/week	\$2.31/hour
	1 Volunteer Coord.		

TABLE XII (continued)

Social Service Agencies

	<u>Staff</u>	<u>Working Hrs. of Staff</u>	<u>Wage Rates</u>
United Cerebral Palsy	2 Drivers (one Custodian & one Teacher's Aide)	8 a.m. - 9:30 p.m. 1 p.m. - 2:00 p.m.	\$3.00/hour \$3.00/hour
Waterbury CETA	1 Field Rep. (Driver) 3 Job Developers (Drivers)	8:50 a.m. - 4:50 p.m.	Salary
Waterbury Regional Center	30 Drivers (Staff)	As Needed	\$3.64/hour (aides) \$4.12/hour (Teachers)
United Cerebral Palsy	2 Bus Aides	8 a.m. - 9:30 p.m. 1 p.m. - 2:00 p.m.	\$3.00/hour
Waterbury YMCA	8 Drivers (Staff) 1 Coordinator	As Needed	\$2.50/hour to 3.50/hour
Western Conn. Jewish Community Center	2 Drivers (one is a backup)	As Needed	\$3.00/hour
Waterbury Assoc. for Retarded Citizens	10 Drivers	7:30 a.m. - 3:45 p.m. or as needed	Confidential

Municipally Sponsored Mini Buses

Cheshire Seniors Mini Bus	3 Drivers 1 Dispatcher-Coord.	19.5 hours/week	\$2.75/hour \$7,000/year
Comprehensive Trans. Systems (Wolcott)	1 full-time 1 part-time 1 Director	9 a.m. - 5 p.m. Saturday 9 a.m. - 5 p.m.	\$130/week \$ 12/week Salary
Mini Transit	4 Drivers/full-time 1 Driver/part-time 1 Admin. Assist. 1 Secretary/Dispatcher 1 Director	8 a.m. - 4:30 p.m.	\$5,940/year 3,300/year 6,600/year 6,000/year 11,550/year
Naugatuck Dial-A-Ride	4 part-time Dispatchers 3 part-time Drivers	30/week for all 30/week for all	\$2.21/hour 2.21/hour
Oxford Community Carpool	27 Volunteers	9 a.m. - 5 p.m.	None
Prospect Mini Bus	4 Drivers (including one sub) 1 Dispatcher	9 a.m. - 5:30 p.m. 9 a.m. - 12 Noon)	\$2.65/hour \$2.65/hour
Southbury Seniors Mini Bus	1 Dispatcher/ Driver Escort	5 p.m. - 6 p.m. 9 a.m. - 5 p.m.	\$3.20/hour 3.50/hour
Watertown Mini Bus	1 Driver 1 Driver 1 Dispatcher	3 days/week 2 days/week 5 days/week	\$2.32/hour 2.32/hour Salary

TABLE XII (continued)
Municipally Sponsored Mini Buses

	<u>Staff</u>	<u>Working Hrs. of Staff</u>	<u>Wage Rates</u>
Woodbury Mini Bus	1 Driver 1 Director of Senior Center 1 Answering Service	9 a.m. - 5 p.m.	\$3.50/hr.
Four Hills Mini Bus	Driver Dispatcher	9:30 a.m. - 4:30 p.m. 9:30 a.m. - 11:30 a.m.	\$112/week \$2.20/hour

SOURCE: CNVRPA staff work, October, 1976.

TABLE XIII

Estimated Number of Clients Served and
 Passenger Trips Made by Mini Buses for
 the Elderly and Social Services Agencies:
 Fiscal Year 1975-1976

Agency	Total # 1975-76 Unduplicated Clients	Total # 1975-76 Passenger Trips
<u>Elderly Mini Buses</u>		
Cheshire Senior Day Center	150	12,500
Comprehensive Transportation Services	157	6,459
Four Hills Mini Bus (Thomaston)	164	3,000
Model Cities Mini Transit	3,100	48,391
Naugatuck Dial-a-Ride	210	10,782
The Oxford Community Car Pool	21	960
Prospect Mini Bus	112	3,532
Southbury Seniors Mini Bus	184	5,166
Watertown Dial-A-Ride	338	9,486
Woodbury Seniors Mini Bus	150	5,146
TOTAL	4,586	105,422
<u>Social Services Mini Buses</u>		
American Cancer Society, Waterbury Unit	80	2,080
Bethlehem Lions Club	40	1,100
Carlton Towers and Westview Apartments	71	3,120
Comprehensive Employment Training Act (CETA)	100	200
Connecticut State Dept. of Social Services	NA	NA
Easter Seal Rehabilitation Center of Greater Waterbury	200	7,500
Elderly Health Screening Services	138 (Nov-July)	240
Elderly Nutrition Program (COG/CNV)	NA	NA
Fish - Waterbury	800	2,400

TABLE XIII

Estimated Number of Clients Served and
 Passenger Trips Made by Mini Buses for
 the Elderly and Social Services Agencies:
 Fiscal Year 1975-1976

Agency	Total # 1975-76 Unduplicated Clients	Total # 1975-76 Passenger Trips
<u>Social Services Mini Buses (continued)</u>		
Fish - Woodbury	40	1,000
Headstart (NOW)	126	35,280
Heritage Village Mini Bus	25	4,370
Morris Foundation	293	2,460
Neighborhood Youth Services	500	2,500
NOW, Inc. (Community Services)	NA	NA
Pearl Street Neighborhood House	400	4,500
Puerto Rican Youth Organization (PRYO)	400	6,240
Red Cross, Naugatuck Chapter	231	1,750
Retired Senior Volunteer Program (RSVP)	75	1,560
United Cerebral Palsy of Greater Waterbury	16	6,400
Division of Vocational Rehabilitation	NA	NA
Waterbury Association for Retarded Citizens	85	12,100
Waterbury Regional Center	47	650
Western Conn. Jewish Community Center	300	5,500
Y.M.C.A. (Waterbury)	1,000+	7,488
TOTAL	4,967	108,438

Source: CNVRPA Staff work November, 1976.

NA = Not available

TABLE XIV
An Assessment of Elderly Transportation Needs in the CNVR: October, 1976

	<u>Estimated¹ Elderly Over 60 in 1975</u>	<u>Estimated # of Elderly Over² 60 without Auto</u>	<u>Total # of Elderly Over 60³ Utilizing Mini Bus October, 1976</u>	<u>Ratio of Elderly Pop. to Elderly Mini Bus Users(%)</u>	<u>Ratio of Elderly Pop. without Auto to Elderly Mini Bus Users(%)</u>
Beacon Falls	507	202	0	0	0
Bethlehem	386	93	40	10.4	43.0
Cheshire	2,214	661	150	6.7	22.6
Middlebury	984	266	0	0	0
Naugatuck	3,564	1,461	210	5.8	14.3
Oxford	546	131	21	3.8	16.0
Prospect	596	137	112	18.7	81.7
Southbury	2,403	649	184	7.6	28.3
Thomaston	862	302	164	19.0	54.3
Waterbury	19,932	10,963	1,475	7.4	13.4
Watertown	2,354	1,342	338	14.3	25.1
Wolcott	1,087	554	151	13.9	27.2
Woodbury	1,036	528	150	14.4	28.4
CNVR	36,471	17,141	2,996	8.2	17.4
Waterbury	19,932	10,963	1,475	7.4	13.4
Remainder of Region	16,539	6,326	1,521	9.2	24.0

¹Projection based on U.S. Census Data for 1970.

²Operation Outreach, 1975.

³CNVRPA Survey, October, 1976.

TABLE XV

Trip Purposes of Elderly Passengers of MiNi Transit and Selected
Suburban Mini Buses: 1975 - 1976¹

	MiNi Transit		Naugatuck ²		Prospect ³		Southbury	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Medical	15,396	31.8	338	6.7	226	6.4	357	6.9
Shopping	11,539	23.8	2,756	55.1	1,676	47.4	2,027	39.2
Recreation	-	0	-	-	370	10.4	2,649	51.3
Education	11,856	24.5	-	-	-	-	-	-
Nutrition	4,505	9.3	-	-	254	7.2	-	-
Miscellaneous	5,095	10.4	2,018	40.3	1,006	28.5	127	2.4
	<u>48,391</u>	<u>100</u>	<u>5,112</u>	<u>100</u>	<u>3,532</u>	<u>100</u>	<u>5,160</u>	<u>100</u>

	Watertown		Wolcott	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Medical	606	6.4	2,072	32.1
Shopping	2,216	23.3	2,679	41.5
Recreation	1,058	11.1	1,046	16.2
Education	-	-	-	-
Nutrition	4,180	44.0	596	9.2
Miscellaneous	<u>1,426</u>	<u>15.0</u>	<u>56</u>	<u>0.8</u>
	9,486	100	6,449	100

¹ For period October 1, 1975 to September 30, 1976.

² For period July 1, 1973 to June 1, 1975.

³ For period July 1, 1976 to September 30, 1976.

SOURCE: MiNi Transit monthly reports and Northwest Conn. Agency on Aging, October, 1976.

TABLE XVI

Operating Efficiency of Municipal Elderly Mini Bus Services in the CNVR: 1975 - 1976

	<u>Total Expen- diture</u>	<u>Passen- ger Trips</u>	<u>Miles</u>	<u>Cost/ Mile</u>	<u>Cost/Passen- ger Trip</u>	<u>Passenger Trip/ Mile</u>	<u>Miles/ Passenger Trip</u>
MINI Transit	\$65,187	48,391	79,486	82¢	\$1.34	.60	1.64
Naugatuck Dial-a-Ride	\$10,700	10,782	14,480	74¢	\$.99	.74	1.34
Watertown Mini Bus	\$13,627	9,486	20,252	67¢	\$1.43	.46	2.13
Cheshire Seniors' Mini Bus	\$13,174	12,500	25,800	51¢	\$1.05	.48	2.06
Comprehensive Transportation System (Wolcott)	\$17,326 ¹	6,459	39,792	43¢	\$2.68	.16	6.16
Southbury Seniors Mini Bus	\$10,590	5,166	18,367	57¢	\$2.05	.28	3.55
Prospect Mini Bus	\$10,331 ²	3,532	16,500	62¢	\$2.92	.21	4.67
Four Hills Mini Bus	\$ 9,321	3,000	16,640	56¢	\$3.10	.18	5.5
Woodbury Mini Bus	\$ 8,445	5,146	14,000	60¢	\$1.64	.36	2.70

¹Excludes \$4,000 for purchase of a new van.

²Excludes \$5,650 for purchase of a new van.

SOURCE: MINI Transit monthly reports, CNVRPA Staff Work and Northwest Conn. Agency on Aging, October, 1976.

TABLE XVII-A

Transportation Cost and Sources of Funding
for Municipality Sponsored Mini Buses:
Fiscal Year 1975-76

Organization	Total Operating Cost	Sources of Funding
Cheshire Seniors Mini Bus	\$13,174	Town Funds, Donations
Comprehensive Transportation	21,716	Title III Older Americans Act, town funds, and donations
Model Cities Mini Transit	65,187	HCDA Categorical funding, Title I
Naugatuck Dial-a-Ride	10,700	Town Funds
Oxford Community Car Pool	400	Revenue Sharing
Prospect Mini Bus	17,714	Title III Older Americans Act and town funds
Southbury Seniors Mini Bus	13,614	Title III Older Americans Act, town funds, and donations
Watertown Dial-a-Ride	13,627	Town funds and donations
Woodbury Mini Bus	8,445	Town and private funds
Four Hills Mini Bus	9,321	Title III Older Americans Act, town funds, and donations
	\$173,898	

Source: CNVRPA Staff work, December, 1976.

TABLE XVII-B

Transportation Cost and Sources of Funding for Social Service
Transportation Programs: Fiscal Year 1975-76

Organization	Total Operating Cost	Total Budget of Organization	Percent of Total Budget Spent on Transportation	Sources of Funding
American Cancer Society	\$ 600	\$ 18,000*	3.3	Private contributions of time and money by volunteers
American Red Cross	3,200	34,500	9.3	United Way - trust fund
Bethlehem Lions Club	0	0	-	Bennett School Bus Co.
Conn. Dept. of Social Services	143,000	9,882,000	1.5	Title XIX - Social Security Act
Division of Vocational Rehabilitation	59,000	500,000	11.8	80% Federal, 20% State HEW Social and Rehabilitative Services
Easter Seal Rehabilitation Center	20,000	600,000	3.3	Div. of Vocational Rehab., Education Dept., fees of Clients
Elderly Health Screening	13,975	82,510	16.9	Title III and match funds
Fish of Waterbury	400	400	100.0	Council of Churches and donations
Fish of Woodbury	325	325	100.0	Local church funds
Carlton Tower and Westview	2,880	1,500,000	0.19	Rental Charges

*Functional allocation from Service and Rehabilitation from the Waterbury Unit Budget.

TABLE XVII-B (continued)

Transportation Cost and Sources of Funding for Social Services
Transportation Programs: Fiscal Year 1975-76

Organization	Total Operating Cost	Total Budget of Organization	Percent of Total Budget Spent on Transportation	Sources of Funding
Headstart	\$20,662	\$ 48,100	42.9	HEW Office of Child Dev., DCA
Heritage Village Mini Bus	1,312	218,000	0.6%	Resident's Dues
Meals-on-Wheels, COG/CNV	17,250	303,000	5.7	Title VII Older Americans Act
Morris Foundation	14,500	161,345	8.9	LEAA and Conn. Dept. of Mental Health
NOW, Inc., Community Services	42,893	664,000	6.4	Community Services Administration. Dept. of Community Affairs
Adult Redirection, Senior Achievement, DCA Summer Camp, CETA	13,808	268,176	5.2	CETA, LEAA, AAA
RSVP	8,297	34,294	24.2	Area Council to Improve our Neighborhood (ACTION)
Pearl Street Neighborhood House	7,000	78,000	8.9	United Way, other groups
Puerto Rican Youth Organization (PRYO)	11,300	21,000	53.4	Model Cities, private
United Cerebral Palsy	5,300	153,000	3.4	United Way, local school board tuition contracts

TABLE XVII-B (continued)

Transportation Cost and Sources of Funding for Social Service
Transportation Programs: Fiscal Year 1975-76

Organization	Total Operating Cost	Total Budget of Organization	Percent of Total Budget Spent on Transportation	Sources of Funding
Waterbury Association for Retarded Citizens	\$34,500	\$ 240,000	14.4	General budget and contributions
Waterbury CETA	4,890	208,000*	2.3	CETA - Title I
Waterbury Regional Center	19,240	1,100,000	1.7	Conn. Dept. of Mental Retardation
Waterbury YMCA	7,250	500,000	1.4	YMCA, United Way depreciation fund
Western Conn. Jewish Community Center	6,800	260,000	2.6	Charitable contri- butions, United Way
	458,382	16,874,650	4.5**	
Total Transportation Expenditures for Municipal Mini Buses	\$173,898			
Total Transportation Expenditures for Social Services Mini Buses	458,382			
GRAND TOTAL	631,545			

*Administration budget of the Waterbury CETA Office.

**Excluding the Department of Social Services transportation expenditures. When the transportation services offered by Heritage Village and Carlton Towers are excluded the average percent of agency budget spent on transportation increases to 5.9%

TABLE XVIII

True Cost of Social Service Transportation Programs:
Fiscal Year 1975-1976

Agency	Reported ¹ Operating Cost	Hidden ² Administrative Cost	Hidden Cost as a Percent of Reported Operating Costs	True Operating Costs
American Red Cross	\$ 1,200	\$ 2,000	166.0	\$ 3,200
American Cancer Society	-	600	N/A	600
Division of Vocational Rehabilitation	50,000	9,000	18.0	59,000
Easter Seal Rehabilitation	15,000	5,000	33.0	20,000
Headstart	15,900	4,762	29.9	20,662
Meals-on-Wheels	15,000	2,250	15.0	17,250
Morris Foundation	6,000	8,500	141.6	14,500
NOW, Inc. (Community Services)	16,393	26,500	161.1	42,893
RSVP	6,442	1,855	28.7	8,297
Waterbury CETA	4,090	800	19.5	4,890
Waterbury YMCA	2,050	5,200	253.6	7,250
Waterbury Regional Center	16,740	2,500	14.9	19,240
Western Connecticut Jewish Community Center	3,800	3,000	78.9	6,800
PRYO	1,500	9,800	653.3	11,300
Pearl Street Neighborhood House	4,000	3,000	75.0	7,000
Waterbury Association for Retarded Citizens	30,000	4,500	15.0	34,500
Totals	\$188,115	\$89,267	47.5	\$277,382

Source: CNVRPA Staff work November, 1976.

¹Prepared by Directors of the Social Service Agencies during October, 1976.

²Prepared by the CNVRPA based on information supplied by Social Service Agencies during November, 1976.

TABLE XVII-B (continued)

Transportation Cost and Sources of Funding for Social Service
Transportation Programs: Fiscal Year 1975-76

Organization	Total Operating Cost	Total Budget of Organization	Percent of Total Budget Spent on Transportation	Sources of Funding
Waterbury Association for Retarded Citizens	\$34,500	\$ 240,000	14.4	General budget and contributions
Waterbury CETA	4,890	208,000*	2.3	CETA - Title I
Waterbury Regional Center	19,240	1,100,000	1.7	Conn. Dept. of Mental Retardation
Waterbury YMCA	7,250	500,000	1.4	YMCA, United Way depreciation fund
Western Conn. Jewish Community Center	6,800	260,000	2.6	Charitable contri- butions, United Way
	458,382	16,874,650	4.5**	
Total Transportation Expenditures for Municipal Mini Buses	\$173,898			
Total Transportation Expenditures for Social Services Mini Buses	458,382			
GRAND TOTAL	631,545			

*Administration budget of the Waterbury CETA Office.

**Excluding the Department of Social Services transportation expenditures. When the transportation services offered by Heritage Village and Carlton Towers are excluded the average percent of agency budget spent on transportation increases to 5.9%

TABLE XIX
Operating Efficiency of Selected Social Service
Transportation Programs in the CNVR: 1975-1976

<u>Social Service Agency</u>	<u>Estimated Total Expenditures</u>	<u>Number of Passenger Trips</u>	<u>Number of Miles</u>	<u>Cost per Mile</u>	<u>Cost per Passenger Trip</u>	<u>Passenger Trip per Mile</u>	<u>Miles per Passenger Trip</u>
Easter Seal Rehabilitation	\$20,000	7,500	68,000	\$.29	\$2.66	.11	9.0
Heritage Village	1,372	4,370	4,400	.21	.31	.99	1.0
Morris Foundation	14,500	2,460	52,800	.27	5.89	.04	21.4
Naugatuck Chapter American Red Cross	3,200	1,750	12,000	.26	1.82	.14	6.8
Puerto Rican Youth Organization	11,300	6,240	9,000 ¹	1.25	1.81	.69	1.4
Waterbury YMCA	7,250	7,488	13,000 ²	.55	.96	.57	1.7
Western Conn. Jewish Community Center	6,800	5,500	20,500	.33	1.23	.27	3.7

¹ Estimate based on 25,000 miles recorded over 3 year period of operation.

² Estimate based on 26,000 miles recorded over 2 year period of operation.

SOURCE: CNVRPA Staff work November, 1976.

TABLE XX

Major Destinations of Handicapped Persons in the Greater Waterbury Area: 1976

Facility	Address	Activity	Passenger Trips per Week	Passenger Trips per Year
Wilby High School	Grove St., Waterbury	Swim, Gym	36*	430
Knights of Columbus Hall	Dube Lane, Wolcott St.,	1. Social, Barbershop, Movies 2. Bowling, Bingo, Dance	178* 173*	2,138 2,084
Chase Park	Highland Ave. & Wilson St., Waterbury	Wheelchair Hockey, Softball		
East Mountain Park	East Mountain Park Road, Waterbury	Wheelchair Hockey, Softball	75*	894
Perillo's Bowl-O-Drome	491 Meriden Road, Waterbury	Bowling	NA	NA
Easter Seal Job Shop	Falls Avenue, Oakville	Job Training	1,100	57,200
Easter Seal Rehab. Center	22 Thompkins Street, Waterbury	Therapy	350	18,200
United Cerebral Palsy	61 Bidwell Street, Waterbury	School Infant Programs Swimming Programs	430 22 22**	15,480 1,066 110
Waterbury Handicapped Organization	61 Bidwell Street, Waterbury	Social	15*	360
Waterbury Regional Center	25 Creamery Road, Cheshire	Ice Skating School Swimming Programs	14 240 80	448 8,640 2,880
Waterbury Association for Retarded Citizens	Croft School, Waterbury	School	900	46,800
Waterbury Association for Retarded Citizens	Oakwood Avenue, Waterbury	Preschool	350	12,600

TABLE XIX
Operating Efficiency of Selected Social Service
Transportation Programs in the CNVR: 1975-1976

<u>Social Service Agency</u>	<u>Estimated Total Expenditures</u>	<u>Number of Passenger Trips</u>	<u>Number of Miles</u>	<u>Cost per Mile</u>	<u>Cost per Passenger Trip</u>	<u>Passenger Trip per Mile</u>	<u>Miles per Passenger Trip</u>
Easter Seal Rehabilitation	\$20,000	7,500	68,000	\$.29	\$2.66	.11	9.0
Heritage Village	1,372	4,370	4,400	.21	.31	.99	1.0
Morris Foundation	14,500	2,460	52,800	.27	5.89	.04	21.4
Naugatuck Chapter American Red Cross	3,200	1,750	12,000	.26	1.82	.14	6.8
Puerto Rican Youth Organization	11,300	6,240	9,000 ¹	1.25	1.81	.69	1.4
Waterbury YMCA	7,250	7,488	13,000 ²	.55	.96	.57	1.7
Western Conn. Jewish Community Center	6,800	5,500	20,500	.33	1.23	.27	3.7

¹Estimate based on 25,000 miles recorded over 3 year period of operation.

²Estimate based on 26,000 miles recorded over 2 year period of operation.

SOURCE: CNVRPA Staff work November, 1976.

TABLE XX (continued)

Major Destinations of Handicapped Persons in the Greater Waterbury Area: 1976

Facility	Address	Activity	Passenger Trips per Week	Passenger Trips per Year
YMCA	136 West Main Street, Waterbury	Recreation for Adults	20	1,040
		Recreation for Youth	40	2,080
		Recreation for E.S. Clients (Tuesday and Thursday)	80	4,160
		Summer Camp (July 1 - Aug. 31)	100	800
Community Workshop	165 West Liberty Street, Waterbury	Work	150	7,500
12 Extended Care Facilities in Waterbury			768	42,888
12 Extended Care Facilities in Suburbs			700	37,168
TOTAL			5,322	262,818

*These activities are offered on a monthly basis only. Passenger Trips reflect monthly travel demand.
 **United Cerebral Palsy swimming program meets 5 times a year at the YMCA.

Source: CNVRPA staff work based on information supplied by the Waterbury Regional Center, Greater Waterbury Community Social-Recreation Program, and interviews with the Directors of Social Service Agencies serving the handicapped, January, 1977.

